Breaking Out Stories and Networks of Interdependency: Using actor-network theory to Trace Emergent Challenges to Narrative Norms in AAA and Indie Game Development Sectors

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By Dean Bowman

ABSTRACT

My intervention in this thesis is two-fold: Firstly, I aim to explore how design practitioners are leveraging the form of videogames to tell new types of stories that speak to and help shape newly emerging audience formations, and how the material and organisational structures of the industry constrain or enable those attempts. Secondly, the thesis implements a novel framework adapted primarily from the production studies work of John Caldwell (2008b), which has been recognised as an urgently needed addition to the growing critical tool kit of game studies (Banks et al., 2016), and combined with actor-network theory of Bruno Latour (2005), in order to make an original contribution to the growing methodological field of game studies. I argue that the innovative framework of actor-network theory (Callon et al., 2009; Latour, 2005; Law, 2004) applies particularly well to the shifting videogames industry as an object of study.

My specific focus is on the kinds of stories that are told in the complex and shifting production contexts of game design, but also the kinds of trade stories that circulate within production cultures. Thus I link textual analysis and the study of production by exploring how such narratives are formed within real material spaces of production. I do so by utilising a mixed method of anthropology of production cultures and semi-structured interviews (Galletta, 2013). In particular I have attempted to make the game studio a unit of analysis within the complex flows of narrative intention and economic realities, which ties my work into an emerging field of Studio Studies (Farías and Wilkie, 2015), and I specifically focus on the emergence of the independent studio as a significant challenge to industry norms and the narrative forms and core gamer identities that rest upon them. In doing so I build on a new generation of work in game studies (Anable, 2018; Chess, 2017; Keogh, 2018a; Nooney, 2017; Ruffino, 2018a) seeking to challenge the entrenched academic orthodoxy of game studies.

Acknowledgements

Dedicated to my father
Roger Bowman
Who called me 'his Professor,'
even if he sadly didn't see me become one.

Introduction: Ludonarrative Convergence and the Challenge to Game Studies Orthodoxy

The video game industry is experiencing an identity crisis. Until recently, industry experts, journalists and gamers were confident about describing the medium. Producers and players of video games were assumed to have similar and predictable habits and interests. Video games were marketed as forms of entertainment, and their future was bound up with the development of computing technologies and graphics accelerators. However, the most elementary notions about the industry and culture of digital gaming now appear less simple to analyse, and this generates contradictory descriptions of players, designers and critics.

Paolo Ruffino, Future Gaming (2018), p. 1

In this thesis I will argue that the game industry is becoming an increasingly vital part of the cultural industries and the global reorganisation of production, work and consumption under informational capitalism. Just as new (digital, immaterial) products require new regimes of production; such reconstruction of the production infrastructure demands and actively creates new forms of consumption. Adopting the concept of ideal commodity form from Lee, Stephen Kline, Nick Dyer-Witheford and Greig De Peuter have argued for videogames to be considered the defining product in our current era, arguing that they are the aesthetic offspring of computing technology "that lie at the heart of the post-Fordist reorganisation of work" (2003, p. 75); an observation that makes their rapid growth as the medium of choice for the last two generations unsurprising (Ipsos, 2019). Videogames are so extraordinarily good at helping us to explore the technological landscape of digital capitalism precisely because they are built from the same materials as it is, a fact which leads Aubrey Anable to rightly claim that videogames are a crucial "part of the historically and technologically grounded, yet emergent and evasive, shifts in the everyday conditions of our computer mediated world" (2018, p. xiii).

In light of these larger contextual observations, this thesis aims to articulate and explore some of those changes through the intertwined lenses of narrative texts and the industrial processes that produce them. A word first on my use of 'narrative'. I am not so much interested in narrative in the sense of the theoretical minutiae of narratological theory (Bal, 2009; Chatman, 1980), with its narrators and narratees and implied readers. Such processes have now been exhaustively applied to videogames (Aarseth, 1997; Atkins, 2003; Ensslin, 2014; Hatavara et al., 2015; Hocking, 2007; Ip, 2011; Jenkins, 2004a; Larsen and Schoenau-Fog, 2016; Murray, 1997; Punday, 2019; Ryan, 2003), and though such works are inevitably and sparingly drawn on at times, my interest in narrative more broadly applies to the *types* of stories that can be told within material systems of production, how these are constrained and shaped within larger systems and processes, and particularly within the site of the game studio, which I use here as a unit of analysis. Also deeply connected to the stories it produces are the stories the games industry tells about itself, what John Caldwell calls 'trade stories,' which he defines as reflexive industrial narratives that circulate within production contexts in which the industry reflects upon and perpetuates its values and ideologies (Caldwell, 2008a, pp. 37–38). Such trade stories (explored in more detail in chapter 2) reflect upon and interact with wider socioeconomic contexts, interfacing them to the production cultures of creative workers. Thus, creativity can be more adequately aligned to the needs and imperatives of contemporary cognitive capitalism that, under the ideological regime of neoliberalism, instrumentalises cultural labour fully to economic ends (Boltanski and Chiapello, 2007; McRobbie, 2016; Mould, 2018).

Like Laurent Berlant in her work *Cruel Optimism*, I am using the term neoliberalism not as a "world-homogenizing system whose forces are played out to the same effect, or affect, everywhere" but as a convenient "heuristics for pointing to a set of delocalized processes that have played a huge role in transforming postwar political and economic norms of reciprocity and meritocracy since the 1970s" (2011, pts. 173–175). According to Sociologist Bruno Latour, a theorist whose work hugely informs

this thesis, it is a 'social explanation,' a means of substituting a complex set of phenomena that unfold in networks of human and non-human actors that should be empirically studied, with a top-down definition (habitus, class struggle, patriarchy, etc...); replacing "a surprising but precise expression for the well-known repertoire of the social which is supposed to be hidden behind it" (2005, p. 49). According to Latour such "social explanations have of late become too cheap, too automatic" (Ibid., p. 221), but they are not without their use. Like genres they should be treated as partial and temporary heuristic devices that aid the process of tracing the real underlying network (as Berlant does) rather than obscuring it through a homogenising process.

That considered, my broad use of the term 'narrative' could risk also becoming a social explanation, but rather than utilise the term as a crutch in this thesis I am committed to exploring how narratives (and with it the notion of creativity or innovation) move through specific networks of collaboration, influence and power in material contexts of production. My understanding of narrative thus also overlaps with the notion of discourse that the post-structuralist theorist Michel Foucault developed over the course of his career as a means of historicising deep concepts that come to form and regulate ideological structures in societies through establishing and maintaining a system of norms (Foucault, 1991a). Such highbrow theories have been developed into practical approaches by scholars of discourse analysis, like James Paul Gee, in order to link specific localised statements (individual speech acts, documents, and other forms of recorded meaning, which in linguistics relates to the notion of the utterance) to the general social flow of language (parole in linguistics), the overall store of concepts that utterances are embedded in. In short the concept of discourse links the common, everyday use that "concerns how various sentences flowing one after the other relate to each other to create meanings or to facilitate interpretation" (Gee, 2014, p. 18) with the much larger context of how such discourses accumulate and secrete into powerful and taken-for-granted ideological structures that Roland Barthes (2009a) has called myths. Such myths allow the formation and functioning of specific social groups built in and through such Discourses (Gee uses a

capital 'D' to distinguish this larger form of discourse) in order to explore how: "various and different social groups construct, construe, use, negotiate, contest, and transform [meanings] in the world and in history" (Gee, 2014, p. 25).

The particular social group I am most interested in is that of game designers (although, as this thesis will show, there is much variety even here), but also since groups are crucially formed and maintained in relation to other groups (what Latour calls 'anti-groups') it is also necessary to consider the way designers interface with wider industry structures (publishers, platform holders, games journalists) as well as the complex and shifting audience cultures they attempt to serve. I am interested in how such systems, formed and maintained through such groups of stakeholders and their individual motivations, control and shape the kind of stories that are produced within them, including how developers narrate and negotiate their own experiences within the industry, and how those narratives become crystallised in the texts they shepherd to fruition (only to rebound back upon the discourses that formed them, either supportively or critically). In such a recursive formation, narrative becomes a nuanced and crucial diagnostic frame to explore the kinds and forms of stories that are told by the medium, *alongside* those told about the medium by its various stakeholders (players, designers and critics), in order to explore how these narratives have historically situated a particular type of game and player identity as a dominant norm, whilst excluding others, and finally how this dominant identity is now coming under sustained pressure to change, particularly through the subversive mechanism of the emergent indie sector (which is the subject of chapters 3 and 4).

My intervention here is two-fold: Firstly, I aim to explore how design practitioners are leveraging the form of videogames to tell new types of stories that speak to and help shape newly emerging audience formations, and how the material and organisational structures of the industry constrain or enable those attempts. Secondly, the thesis implements a novel framework adapted primarily from

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the production studies work of John Caldwell (2008a), which has been recognised as an urgently needed addition to the growing critical tool kit of game studies (Banks et al., 2016), and combined with actor-network theory of Bruno Latour (2005), in order to make an original contribution to the growing methodological field of game studies. It amounts to a new approach to studying the games industry holistically that is capable of tracing a course through a highly volatile landscape of disruption, building on new anthropological work in the field (O`Donnell, 2014; Vanderhoef and Curtin, 2015; Weststar, 2015; Whitson, 2018) and opening up further approaches to research. It also allows me to bypass the formalist mire of the ludology/narratology debate (explored and critiqued below) that the field is only recently extracting itself from, reconnecting games (including their audiences and producers) with the wider social, cultural and political contexts that what I call 'orthodox game studies' has typically severed them from.

Another issue this thesis hopes to address tangentially is the traditional neglect of game studies within university humanities departments. Although game studies as an interdisciplinary field orbiting around the Digital Games Research Association (DiGRA) has grown massively in recent years, it still remains at the periphery of the humanities in all but a few universities with specialist departments, and crucial work in the political economy of the cultural industries remains dominated by reflections on film (Caldwell, 2008b; Ortner, 2013), television (Ang, 1991; Caldwell, 2020; Clarke, 2012; Gitlin, 1994), or the music industry (Hesmondhalgh and Baker, 2011; Negus, 1993; Toynbee, 2000). Contra this tendency, it is now a commonplace claim at the start of any work of games scholarship that the games industry is worth more globally than the film and music industry combined (Cellan-Jones, 2019), and it is becoming increasingly difficult to square the growing importance of this medium in our culture with the systematic neglect it suffers in traditional university departments. A claim that begun as an attempt to demonstrate the legitimacy of studying games to the academic establishment has now taken on a greater sense of urgency; each time it is repeated making a more and more urgent case for the desperate need to take games seriously as

the cultural juggernaut they are. Although it is beyond the scope of this thesis to make (yet again) the case for game studies as a serious and worthy academic discipline, I hope it will show that we ignore the cultural impact of games at our peril. If the basic assumption of cultural studies, as summarised by theorists like John Storey, is about studying how identities are formed and transformed through an active "practice of consumption" in the domain of popular culture (Storey, 2018, p. 59), then no other medium today has such a strong claim as an object of analysis within that intellectual paradigm than videogames. Videogames must be placed at the heart of cultural studies discourses, where they have strangely been absent despite the movement's emphasis on taking popular culture seriously, as a recent publication by Soraya Murray (2017) has taken pains to point out. Indeed, videogames continue to have a huge impact on the subjectivities of generations of players who embrace them as their media of choice.[1]

Such a statement of games' influence over a generation is not a rehashing of the now tired accusatory argument that games directly and deterministically promote violent behaviour or other negative forms of socialisation, a position summarised in the media effects debates that dominated academic readings of games in the nineties (for a summary and critique of these debates see, Markey and Ferguson, 2017). As Henry Jenkins argued at the time (2006a), such a stance was always an over-simplistic pinpointing of a politically fraught and overdetermined issue onto the easy scapegoat of a burgeoning new medium with a young and easily victimised fandom. These claims of the political and social impact of games must be one of the reasons that game studies tactically withdrew into more formalist concerns, risking severing games and their study from the site of living culture. Rather than attend to the more nuanced influences games have on society and its underlying systems, to get the field away from behaviouralist accusations of deterministic effects it must have been easier to sever it completely from wider cultural concerns. Jon Dovey and Helen

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[1] one need only look at the incredible penetration of the game *Minecraft* (Microsoft, 2011) and more recently *Fortnite* (Epic, 2017) especially among younger players.

Kennedy were among the first to identify and criticise this impulse of withdrawal, calling for a reconnection of game studies and cultural studies in which the "shaping" effect of "cultural forces" (2006, p. 141) can be best attended to, and it is within this larger tradition of cultural studies that my theoretical approach sits. Although such a defensive withdrawal into formalism undoubtedly protected the field in its embryonic state, and helped create a climate where important work laying down foundational theory and definitions could take place, we are still feeling the shockwaves of such a withdrawal in the more reactionary claims of the fanbase that games should not engage with politics. Thus game studies in its formative years repeated the tendency videogames are often accused of – mindless escapism – in its overt interest in formalism, in the words of Ian Bogost, "videogame studies has reaped what it has sowed – functionalist separatism" (2008, p. 52), from wider cultural concerns including political engagement leading game scholars and broadcasters Cameron Kunzelman and Michael Lutz to suggest that the ludology tradition of European game studies appears to be "allergic to discussing ideology" at all (Kunzelman and lutz, 2020).

With this escapism in mind, and in the remainder of this introduction, I turn a critical lens on game studies itself by reopening a now infamous founding debate between 'ludologists' and 'narratologists' in order to demonstrate how a critical orthodoxy has formed around a highly formalist notion of games with an implicitly gendered set of assumptions. In contrast this thesis takes as self-evident that games, like all popular cultural objects, can be seen as a vital site through which large groups of people express or come to articulate their social and intellectual identities and form their ideological frameworks and therefore embraces cultural studies as an academic context (Gee, 2014; Storey, 2018), which has been as dismissed and demonised in game studies as John Caldwell (2009, p. 170) claims it has been in film studies.

In his seminal analysis of games as a simulation based medium and core component of the growing military-entertainment complex, Patrick Crogan notes that "efforts to define the essential

characteristics of video games have not ceased after more than a decade of research" (2011, p. 20)

and argues that such debates are now considerably stymying the field from addressing increasingly

pressing issues such as the medium's links to technoculture or the larger socioeconomic shifts I

alluded to above. Although the ludology/narratology debate is now well rehearsed – indeed many

might say played to death – retreading this ground allows me to revisit and diagnose what I feel are

its less well understood implications, which continue to have a resonant effect in wider games

culture: namely its attempt to install and reinforce a series of norms that constitute a dominant

understanding of what games are or can be – what Crogan would call a 'gameplay mode' – rather

than to appreciate the shifting products of the industry as part of a complex and continuous process

of becoming for a still youthful medium. In short, here I intend to historicise the debate in the spirit

of Foucault, exploring how some of its tacit values and ideas set the agenda not only for game

studies but for dominant conceptions of games in the broader culture, and that such conceptions

continue to have a material effect on industry formation, design assumptions and audience tastes.

By exploring how the positions of the ludology/narratology debate have shifted over the last two

decades we can get a sense not only of how these concepts of story and gameplay have been

understood in relation to the medium, and how controversial the notion of narrative has tended to

be, but also reveal the underlying logics of exclusion all efforts to impose hard boundaries on a

creative form results in, not least such a multi-modal form as games. By doing so I hope to

demonstrate that this debate, as important as it has been in building the field of game studies and

defining its boundaries, has been historically overstated resulting in an unhelpfully dialectical

polemic that has set the agenda for game studies for too long, excluding many more productive

avenues of enquiry; a situation the discipline has only recently started to recover from. Indeed, in

her book *Literary Gaming* Ensslin (2014) summarises this transition from more formalist,

foundational and definitional discourses characteristic of the ludology/narratology debates as a

transition from first wave to second wave games writing, a concept I take further by suggesting the first wave of game studies has formed a repressive orthodoxy that must be broken from.

PORTRAIT OF AN INDUSTRY IN CRISIS: CONSOLIDATION AND FRAGMENTATION

It is now a truism to acknowledge the rapid and extraordinary growth and spread of the games industry. Martin and Deuze sum up this situation, stating that "in less than a generation, the games industry today has burst from such grassroots and small-scale development processes that preceded it into a corporate-controlled, hit-driven market that successfully engages in competition and cooperation with the cultural industries as a whole" (2009, p. 278). According to Kline et al. by the 1990s the console industry (the platform most associated with the most commercial and formalised part of the industry) had settled into a "tumultuous oligopoly" in which a "handful of major players" dominate, although "their identity and numbers fluctuate depending on the outcome of this internecine competition" (Kline et al., 2003, pp. 171–172).

Mikolaj Dymek sums up this relatively stable picture of teleological progress as the 'infinite expansion fallacy', the notion widely held in the industry (not to mention amongst academics) of a kind of manifest destiny for games to become the "global mass-entertainment" medium of the 21st century (2012, p. 45).[2] The cultural significance I argued for games above not-withstanding, such a portrait also obscures the uneven development of the games industry and its tumultuous oligopoly, not to mention recent significant challenges to that oligopoly via a fragmentation of audiences and development sectors. Contra this view of a stable and formalised industry monolith I attempt here to sketch a portrait of the industry in crisis and under a complex process of reformation. This is in line with a recent argument put forward by Brendan Keogh (2019a) that having gone through a

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[2] Other media developed in similar theoretical paradigms of teleological progression, for instance see Andre Bazin's (2016) classic argument of the development of cinema towards ever greater feats of realism and social relevance.

period of "aggressive formalisation" (as the games industry solidified through the 80s-00s around the games console), which actively sought to exclude the kind of independent or informal modes of development that had proliferated in the early years of the medium and famously embodied in the romanticism of its 'bedroom coders' and 'hacker artisans' (Levene and Anderson, 2012). This process "normalised a particular, commercial understanding of videogame development, which is now becoming unstable through a transition into the current period of intensified intermingling of formal and informal actors" (Keogh, 2019a, p. 16). In short, we are witnessing a process of informalisation centred around the emerging indie sector and its more ad hoc processes.

Here Berlant's understanding of 'crisis' is particularly useful since, rather than see the often discussed rhetoric of crisis as an absolute traumatic break in history, it infuses the term with a sense of the everyday ("crisis ordinariness") that points to an emergent set of affairs on the horizon but not fully formed, against which the current arrangement of forces is attempting to bolster itself:

> The extraordinary always turns out to be an amplification of something in the works, a labile boundary at best, not a slammed-door departure. In the impasse induced by crisis, being treads water; mainly, it does not drown. (Berlant, 2011, pts. 195–196)

This new 'intense informalisation', most markedly in the emergence of the independent (or indie) scene from around 2007, has resulted in "eroding a once distinct line between 'amateur' and 'professional' videogame developers" (Keogh, 2019a, p. 16). Casey O'Donnell important anthropological work *Developer's Dilemma* (2014), supports this view by convincingly arguing how Nintendo set the model for platform holders seeking to dominate the production network through the employment of various pseudo-monopolistic strategies including utilising patented copy protection systems, restrictive agreements with third party developers and extensive litigation in order to control the market. The market was thus deliberately built up as "high risk, high reward,

high initial cost, and high barrier to entry" (O`Donnell, 2014, p. 190), excluding all but the most successful and wealthy actors. The crisis here is a return of the repressed informal set of game development practices characterised by Keogh and captured by the term 'indie' that is now emerging at the periphery of the industry and considerably challenging these taken-for-granted structures of narrative, gameplay and production This thesis hopes to contribute to the growing understanding of this complex and important phenomena by arguing that its independence is often overstated; rather than seeing the indie sector as AAA's dichotomous 'other,' it is much more useful (and realistic) to understand its considerable interdependencies with the industry at large and AAA production in particular. This is the particular subject of chapter 3.

Along with the disruption of long established production processes and narrative forms, there is a tangible threat to disrupt the current industry formation that sustains these; a state in which much has been invested by both the industry, as it attempts to construct and maintain a stable set of norms in a notoriously uncertain cultural industry (explored in chapter 2), but also by the core gaming audience who, as we will see, have carefully constructed their identities around these same normative models of play (Consalvo and Paul, 2019; Fron et al., 2007). Discourse analysis is about studying the language used by people in specific contexts (often called social domains) to exert power or construct certain identities. The basis of discourse analysis is that such discourses are not natural but form over time in specific contexts and are about gaining and controlling social goods. As James Paul Gee explains:

> When two people are engaged in discourse (language in interaction in context) they are communicating with each other via enacting and recognizing socially significant identities. The identities are socially significant because various and different social groups construct, construe, use, negotiate, contest, and transform them in the world and in history. So when two people interact, so too do two (or more) Discourses. (Gee, 2014, p. 25)

According to discourse analysis, one of the core functions of such groups is that they generate and regulate a series of norms that structure correct in-group behaviour and act as gatekeeping mechanisms (Gee, 2014, p. 34). For Foucault the process of normatisation is a means by which a society of control conforms a body to a set of expected standards that, like Barthes myths, are often accepted as correct and natural: "[it] brings with it a principle of both qualification and correction. The norm's function is not to exclude and reject. Rather, it is always linked to a positive technique of intervention and transformation, to a sort of normative project" (Foucault, 2003a, p. 50). Applying the concept to gender, Dianna Taylor says "a norm is normalizing if… it links the increase of capacities and expansion of possibilities to an increase in and expansion of the proliferation of power within society. Simply put, normalizing norms encourage subjects to become highly efficient at performing a narrowly defined range of practices" (D. Taylor, 2009, p. 47). Such a concept applies well to the formation of the normative model of the gamer, but also specifically in the role analysed above that the controller[3] has in this process as it historically evolved to embody and accommodate the FPS as a dominant genre – there is no law that requires a FPS to be made, but the controller deeply conditions this likelihood.[4]

The disruptions to the core gamer model caused by the fragmentation of the industry and the diversifying audience, has led Ruffino to proclaim, in the above epigraph, that the once certain object of what constituted a game or player in industry discourses is now breaking down. The crisis manifests itself as a kind of culture war within gaming communities, a struggle over epistemological meanings (the policing of definitions over what constitutes a game) and ontological relations (the

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[3] There is no contradiction in applying insights gleaned from inquiries into group formation to technological objects because the key benefit of ANT is to treat human and non-human actors symmetrically (Latour, 1992).
[4] Just as Paul Virilio (2006, p. 10) famously theorised that the invention of the ship also brought into possibility the shipwreck; the innovations of capitalism, as attempts to overcome the crises it regularly faces, thus predictably lead to the proliferation of novel and often unintended sociocultural possibilities and consequences.

gatekeeping of who gets to be a gamer), that in its most extreme form has manifested itself in the

Gamergate movement that many scholars and journalists see as manifestation of the struggle

between hardcore male dominated communities of play and emerging audiences, including large

audiences of female players, who have traditionally been cast as gaming's 'Others' (Anable, 2018, p.

xvii; Chess, 2017, pp. xii–xiii; Kagen, 2017; Keogh, 2018a, p. 197; Kuchera, 2014; Ruffino, 2019).

Given the events following the formation of the Gamergate controversy, and its coagulation into a

coherent movement oriented around the defence of a narrow conservative conception of

videogames and misogynistic attacks on female developers, journalists and even academics who

were perceived as a threat to these habitual forms of play (Chess and Shaw, 2015; Kuchera, 2014;

Massanari, 2017; Quinn, 2017; Ruffino, 2018b), the very term 'gamer' has recently become a highly

politicised category. This is evidenced by a flurry of articles from progressive games journalists on

prominent blogs declaring the label 'gamer' dead or redundant (Alexander, 2014; Bernstein, 2014;

Johnston, 2014; Plunkett, 2014), a stance that both responded to, but also intensified, the activities

of Gamergate (Ruffino, 2019).

Although many scholars have shown how the dominant male gamer identity is in many ways a

construct of the industry itself – for instance the result of historical shifts in the chief sites of gaming

such as the emergence of the arcade scene and its associations with a kind of technomasculinity

(Kocurek, 2015), the development of advertising regimes aimed at cultivating a hardcore game

audience (Chess, 2017; Dymek, 2012) or a construct of the mode of address of gaming magazines

which helped form the early sub-cultural identity of gamers (Kirkpatrick, 2015) – the image of the

hardcore male identity of the gamer persists as a dominant, normalised model of the game player in

the mainstream cultural imaginary. This is so much the case that many books oriented towards a

popular readership in particular are deeply concerned with questioning the common-sense view of

gamers, with Jamie Madigan for instance proclaiming that the "old stereotypes of gamers as kids,

social misfits, or basement-dwelling recluses just don't hold up" (Madigan, 2015, p. 3).

Exploring how the videogame industry has fallen foul of such stereotypes, indeed has often played into them in terms of its male-centric advertising, does not mean that this is a natural, neutral or inevitable state of affairs. As Foucault has shown in his analysis of social discourses like medicine (2003b), discipline (1991b), and sexuality (1978), such normative concepts are the result of a sequence of historically contingent factors, which forms the key to his genealogical approach to historical analysis. This approach seeks to reveal and contextualise the historical mechanisms by which discourses develop and are taken up by a society, rather than to assess their truth value or absolute point of origin, like Madigan is keen to do above. As Foucault elegantly summarises such a "a genealogy of values, morality, asceticism, and knowledge will never confuse itself with a quest for their 'origins,' will never neglect as inaccessible the vicissitudes of history. On the contrary, it will cultivate the details and accidents that accompany every beginning" (Foucault, 1991a, p. 80). In short, a state of affairs does not arise from nothing, and we should consider the range of factors that over-determine its emergence. One important way of addressing the genealogy of the medium is to move from the game text as a formal entity to the multiplicity of the wider contexts in which it developed – linking us to the cultural studies tradition that Dovey and Kennedy (2006) have called for.

An example will serve to demonstrate the benefit of this Foucauldian perspective on historicising events. In *A Play of Bodies*, Brendan Keogh draws on Katherine Hayles' (2005, p. 102) notion of "embodied textuality" to move towards "a mode of textual analysis that accounts for how the text is materially embedded in the world" (Keogh, 2018a, p. 21). By shifting attention from the text to the materiality of the controller Keogh is able to link this device to the emergence of a normalised approach to play constructed around the first-person shooter (or FPS) as the dominant genre. Such an approach to the embodied nature of play and the interfaces we use is often neglected under dominant regimes of immersion, where the interface is intended to fall away so the player imagines

they are in direct, unmediated control of the action – what Katie Salen and Eric Zimmerman have famously critiqued as 'the immersive fallacy' in which an industry obsessed with realism and graphical fidelity seeks continually to produce "a representation completely indistinguishable from reality" (Salen and Zimmerman, 2003, p. 451). Elsewhere, along with Erin Pearson (2019), I have analysed the centrality of the FPS genre to the notion of player empowerment, but here it is sufficient to say that, as noted by Alexander Galloway in his analysis of the genre, "a subjective camera perspective, coupled with a weapon in the foreground" defines the first-person shooter, becoming its " kernel of the image" (Galloway, 2006, p. 57). This aesthetic and ontological repositioning of the player behind the barrel of a gun, which was acclaimed as one of the most revolutionary contributions of id Software to the games industry through their games *Wolfenstein 3D* (1992) and *DOOM* (1993),[5] was accompanied by a transformation of the controller around the skeuomorphic metaphor of the gun. For instance, Keogh notes how the primary functions of the controller had shifted from the face buttons (the key controls for platformers and fighting games popular in previous generations) to the triggers (2018a, p. 105), which as the name implies control aiming and shooting in what are now firmly standardised FPS control schemas. These triggers (situated at the top of the controller) were from the N64 onwards a core feature of the controller's product design and were increasingly moulded into actual triggers to be squeezed, which along with their ergonomic grips and haptic feedback (principally and most effectively used to mimic firearm recoil) meant that the videogame controller, in light of its rapidly growing star genre, was aspiring to itself become a gun.

Although this simultaneous standardisation of hardware and genre gives the impression of a homogenised and transcendent player body that exists outside of discourse, the truth of play is much more diverse, making such a genealogical approach essential precisely because "the

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[5] See David Kushner (2004) for an historical account of the impact of this game on the FPS genre and the games industry at large.

videogame player is very much a dispersed, fragmented, and heterogeneous subject, and, hence, conceptualizing such a textuality—an embodied textuality—is not just timely for videogames but required" (Keogh, 2018a, p. 44). A reciprocal, self-reinforcing and iterative process can thus be identified in the production of content, and even in the development of the controller itself, which maps onto what Mikolaj Dymek (2012) calls the 'industry spiral' model, in which powerful platform holders and publisher/marketing strategies set the standards for the industry at large, construct priorities, norms and values at the macro level that trickle down and inform individual texts (or hardware). Further the player's use of the controller trains them to perform as a gunmen in game (A. Phillips, 2015), building this as a core expectation of future games. Such repetitive actions reinforce the expectation that the controller will continue to be used in such a way, thus to accommodate a specific subset of games for a specific subset of players maintaining the context of what Stephen Kline et al. refer to as "militarised masculinity" which they argue increasingly came to dominate console games in the post 9/11 era. Such a state of affairs produces an aesthetic "bias [that] privileges themes and representations of warfare, fighting, combat, and conquests along with the subject positions of aggressive, active male characters" which are "constructed by design and marketing practices aimed at the industry's most reliable customers - Adolescent boys and young men" (2003, pp. 194–195). Individual products and their larger platforms reinforce one another in a recursive loop.

Such recursion can be seen in the 'hegemony of play' model put forward by Janine Fron, Tracy Fullerton, Jacquelyn Ford Morie, and Celia Pearce (a group of designer/academics together known as the *Ludica Collective*), which is a highly useful since it links the overall structure of the industry with the types of audiences it produces via specific products with highly homogenous characteristics. This dominant audience persona is expressed in the notion of the 'hardcore' (or just core) gamer who the authors describe as:

"ground zero" from the perspective of game design and marketing, and is taken by industry

as the "de facto" target demographic for its goods. It is characterized by an adolescent male

sensibility that transcends physical age and embraces highly stylized graphical violence, male

fantasies of power and domination, hyper-sexualized, objectified depictions of women, and

rampant racial stereotyping and discrimination. (Fron et al., 2007, p. 7)

This subject position is maintained via specific products with highly homogenous characteristics, and

the authors further argue that in a circular, reinforcing logic the tastes of this group maintains the

homogeneity of the system either through consumer support or by entering the industry workforce

itself and replicating the kinds of products they are familiar with, a mechanism for perpetuating

certain types of games for certain types of audiences noted by many other theorists (Dovey and

Kennedy, 2006, p. 62; Dymek, 2012). Like Dymek's notion of the industry spiral, Fron et al. see the

hegemony of play as a reinforcement mechanism perpetuating a particular industry sanctioned form

of play:

Today's hegemonic game industry has infused both individuals' and societies' experiences of

games with values and norms that reinforce that industry's technological, commercial and

cultural investments in a particular definition of games and play, creating a cyclical system of

supply and demand in which alternate products of play are marginalized and devalued. (Fron

et al., 2007)

This highly reciprocal model also ties well into the circuits of production model that Kline et al. put

forth in their ground-breaking *Digital Play* (2003, p. 23), which analyses the industry from three

interlocking perspectives of technology, culture and marketing, showing how "each of the three

subcircuits is itself a dynamic process, involving socially organised structured flows, cultural

practices, and feedback loops that bind human agents and artefacts in cycles of creation,

consumption, and communication" (Kline et al., 2003, p. 52). As useful and radically disruptive as

Kline et al.'s model is, especially for its recognition of how player subjectivities (like that of the core

gamer) are formed in and through these circuits, it somewhat neglects the production circuit (of

which marketing is but one part) that further binds these three subcircuits together. This thesis can

thus be understood as building on this innovative model, addressing games as technology, culture

and *material production*.

This is essential because as Fron et al. suggest the structural conditions of the industry work to

replicate and perpetuate themselves via this highly recursive hegemonic cycle, maintaining a certain

set of conventions around genre and character that reinforce dominant narrative forms, like that of

the military first-person shooter, which are more aligned to the dominant gamer paradigm. Thus the

core gamer is repeatedly centralised in AAA game texts as the empowered agent at the heart of the

narrative experience, and whose agency is the prime mover of its plot – a situation that is

encapsulated in general discourse by the idea that traditional games tend to cater to power

fantasies (Kunzelman, 2018). This in turn perpetuates and safeguards the dominance of industry

norms through creating a cadre of future game developer from this narrow audience.

With this recursive model in mind it becomes quickly apparent that none of the circuits noted in

Kline et al.'s model can really be considered in isolation. Building on Kline et al.'s model this thesis

thus attempts to undertake the vital work of bridging the gap between a textual analysis of the game

as cultural object within a cultural studies framework, and approaching the material reality of the

industry via a production studies approach, thus eschewing the field's tendency to focus on the

experience of play or the formalities of the text exclusively, but instead to look at the dialogue

between the two. Instead I am interested here in how the domains of text and player are intricately

bound up with the production context itself, in intersecting networks of influence and

interdependence. Since it is beyond the scope of the thesis to enact a thorough reception study of

actual players, I follow in the methodological footsteps of Shira Chess who studies the relation of the

audience to the industry via an analysis of the ways the industry itself discursively constructs that

audience. I thus focus on the production context and the text it produces as a manifestation of how

it imagines the gaming audience to be changing in this particular moment.

This dominant paradigm of the 'gamer' is to be understood not as an absolute, essentialist category

incorporating all players (nor even all male players), but as representing a discursive, shifting and

informal subset who have a huge degree of investment in and influence over the industry. Despite

being largely a discursive construct largely produced by the industry itself, it is none-the-less a useful

rubric since it emerged and functioned as a normative model alongside the period of consolidation

in the industry into what has become known as the console era (Keogh, 2018a; Kirkpatrick, 2015),

where a narrow range of industry platform holders established the dominant model of commercial

'triple-A production' (hitherto referred to as AAA). Meanwhile struggles around the meaning of the

gamer category significantly coincide with the diversification of the industry, its production

practices, its sites of consumption and its products in the last decade. Indeed, the recent history of

the industry has been characterised by a fragmentation into a number of sectors including

development of games for social networks often referred to as casual and social gaming (Juul, 2012),

game production for mobile phones (Chess, 2018), games for social impact often termed 'serious

games' (Bogost et al., 2010), and the independent sector (hitherto referred to as 'indie'). Keogh

summarises some of the factors steering this disaggregation as "new audiences, distribution

platforms, and development tools are expanding the videogame industry into an ecosystem that is

at once broadly global and intensely localised" (2019a, p. 14). This is not so much a completely new

phenomena, but a rebalancing of an always extant relation between informal and formal processes

(Keogh, 2019a) of production brought about by a series of technosocial innovations (new accessible

production tools and digital distribution networks) that serve to loosen the grip of a small cabal of

platform holders (Sony, Microsoft, Nintendo) and big publishers (EA, Activision, Ubisoft) on the

industry tiller.

HISTORICISING THE LUDOLOGY/NARRATOLOGY DEBATE

One key part of the hegemony of play model to this thesis is the claim of Fron et al. that the

situation of accepting the traditional gamer identity as the industry's chief demographic and the

implicit norm against which all else is contrasted, is not only a product of the industry but has been

replicated in game studies academia due to a tendency for it to adopt industry models of both ideal

players and dominant generic forms uncritically as natural and inevitable rather than constructed

through numerous processes of production, promotion and reception (Chess, 2017; Kline et al.,

2003). Game studies discourses, they claim, have taken their lead from the industry texts that are

most popular, resulting in an internalisation of the values of such texts leading academics to

"embrace, valorize, and fetishize the cultural production of the Hegemony of Play." As a

consequence what has been "taken up as a matter of taxonomy" are actually often "values of the

video game industry that are not necessarily inherent qualities of games" (Fron et al., 2007, p. 2).

In the rest of this introduction I explore of the ludology/narratology debate as one such front in

which these industry myths are perpetuated, by creating a false distinction between the potential

for games to be a storytelling medium, a mode many writers see as more attuned to female

interests (Ray, 2004), versus or one that is based on more masculine notions of competitive struggle

within a system of rules (Fullerton et al., 2008). Following the claims of Fron et al., I hope to show

that such normative values explored above are embedded in this formative debate for the field;

written, you might say, into the very underlying code of game studies.

The ludology/narratology debate is typically summed up in overly simplistic terms as a struggle

between two groups of theorists who see gameplay or narrative respectively at the heart of the

medium. Even Jon Dovey and Helen Kennedy's otherwise nuanced critical overview of videogames as an aesthetic, technical and cultural form provides a typical gloss of narratology and ludology positions:

> Broadly speaking, the former has argued that games can be studied through recourse to existing literary and humanities methods of understanding texts, whilst the latter has argued that this cannot be the case since a computer game is not a conventional text at all but an activity more akin to play or sports. (Dovey and Kennedy, 2006, p. 22)

Though such cursory definitions are understandable given the authors' desire to sidestep such unproductive controversies and to get onto the business of attending to other aspects of games culture that have been obscured by them, the constant replication of this surface rendering of the debate serves to mask some of the deeper ideological assumptions that underpin it. It is the normative assumptions of the debate that I want to attend to here in order to argue that the ludology position serves to create and maintain the critical orthodoxy, described above, that subtly and indirectly, and often no doubt unintentionally, reinforce the normative forms of play and its gendered implications. In a manner I see this debate functioning as a very large scale example of what Roland Barthes calls myth, which he understands as a deeply embedded and taken-for-granted means of explaining the world – a process of mystification – which circulates in a society's discourses (2009a, p. 9). In such a system, ideology naturalises itself as common sense and thus renders itself incontestable, even though it is really created in highly contingent moments of historical formation through the specific interests of groups working (often intentionally) upon social materials. This process of myth is summarised by Jonathan Culler: "Objects and practices, even the most utilitarian, function the same way, endowed with second order meaning by social usage" (2002, p. 24). Myths are produced in discourses and are an example of such discourses, and so approaching the debate in light of Foucault's genealogical approach, introduced above, will allow us to historicise it within the

larger context of the formation of the discipline of game studies and the growth of the larger

industry and its formalisation around the core gamer. For instance, such myths are also a quality of

the trade stories that I analyse in chapter 2; discursive constructs that circulate within industry

contexts and serve to prop up its values and maintain its status quo.

To explore the ludology/narratology debate genealogically we need to observe how it emerged and

developed. Whilst it existed in a protean form beforehand, 1997 provides a useful starting point

since this year saw the publication of two key works that contributed to the formation of the field of

game studies like no other and continue to exert a broad influence today: Janet Murray's *Hamlet on*

the Holodeck: The Future of Interactive Narrative in Cyberspace (1997) and Espen Aarseth's

Cybertext: Perspectives on Ergodic Literature (1997). Although they made no direct claims of

allegiance in themselves, in the following years these books were discursively positioned as the

founding texts of narratology and ludology respectively (Mäyrä, 2008, p. 8). It is also important to

acknowledge the contexts in which the authors were writing, so as not to misunderstand their

intentions and their contributions to game history.[6] Writing against a tendency in the humanities to

denigrate the emerging medium of videogames and the perception of computational culture more

broadly as a threat to society, in *Hamlet on the Holodeck* Murray posited computers as the inheritors

of print culture rather than a technological break from it, highlighting the strong narrative and

dramatic potential of the medium, which she claimed "promise[s] to reshape the spectrum of

narrative expression, not by replacing the novel or the movie but by continuing their timeless bardic

work within another framework" (1997, p. 10).

Like Murray's work, Aarseth focuses on continuity with previous forms as much as breaks with them.

Indeed, his analysis is not primarily of videogames (indeed, graphical adventure games are one of

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[6] As far as I'm concerned the value of the intellectual ideas expressed in both books are beyond dispute, rather
what I take issue with is how these are positioned within the context of the ensuing debate.

the few forms of digital game addressed) but mostly on hypertext works like Michael Joyce's

Afternoon (1990) and Stuart Moulthrop's *Victory Garden* (1992), as well as novels such as Julian

Cortázar's *Hopscotch* (2014 [1963]), computer programmes for generating procedural narration like

ELIZA by Joseph Weizenbaum (1966), and poetic experiments like Raymond Queneau's *Cent Mille*

Milliards de Poèmes (1961). Throughout the book Aaresth ambitiously attempts to construct a

theory that reconfigures our understanding of such temporally, geographically and formally

disparate works, by comprehending them as cybertextual machines. Combining the organic player

and technological text in a feedback loop, the notion of the cybertext according to Aarseth

significantly expands on pre-existing notions of participation found in reader response theory, such

as those of Wolfgang Iser (1980), who argued that the reader played a key role in the hermeneutic

process and was always anticipated by the text itself (which left gaps for the reader to fill in an

imaginative and interactive process). For Aarseth the cybertext is more fundamentally interactive

than the reader response model because it is "a material machine, a device capable of manipulating

itself as well as the reader" (1997, p. 24), furthermore, he considers such works 'ergodic', a

neologism that combines the Greek word *ergon* (work) and *hodos* (path) to specify works where a

"nontrivial effort is required to allow the reader to traverse the text" (1997, p. 1). In short: games

are texts that only exist in that act of play, and that act requires the reader/player to struggle with

them.

A superficial reading of these influential works might suggest a fairly obvious and tidy split between

the two camps, with Murray drawing on a range of narrative theorists from Aristotle to Vladamir

Propp to make a case for games as being part of a 'bardic tradition' that stretches back to Homer,

and Aarseth's position emphasising games first and foremost as finite state machines bought into

play by the agency of the player. It might appear that the former emphasises the modernist,

structuralist traditional role of the author as creative force (Forster, 2005) and Aarseth the post-

structuralist tradition of shifting emphasis to the reader (Barthes, 1993), but crucially there are more

similarities than not between the two works. What Aarseth calls cybertext, Murray calls multiform story in which "the reader assumes a more active role" (1997, p. 40). Furthermore, Aarseth cautions that whilst there are differences between games and narratives "the difference is not clear-cut, and there is significant overlap between the two (1997, p. 5), a sentiment Murray herself echoes, suggesting "the area of immersive enchantment lies in the overlap between these two domains" (1997, pp. 266–7). Such cautionary statements from both authors suggest that the tensions between ludology and narratology have been overstated from the start; discursively constructed after the fact by an ever-diverging set of scholarly practices and the territorial effort of academic boundary work. Whilst so-called narratologists like Murray were seemingly content to consider games as cultural texts that combined ludic and narrative elements in somewhat novel ways, albeit in ways that were contextualised within older traditions of storytelling than the radical newness of a fresh medium, it was ludologists who were to elevate what began as a difference in emphasis to a *cause célèbre* for the emerging field; a field that they themselves were attempting to position themselves at the heart of.[7]

It was in 2001 that the ludologists staged an intellectual coup, seeking to cement their central position in game scholarship with the foundation of *gamestudies.org*, the first journal on the subject. Overseen by Espen Aarseth and supported by an affiliation of Nordic universities and research councils, the journal galvanised the nascent field of European game studies around a nexus of ludology-oriented scholars, thus defining the field of European game studies scholarship as characterised by scientific, technical and structuralist concerns with a formalist focus on the text as noted by American scholars (Kunzelman and Lutz, 2020). In the opening issue key articles by Jesper Juul (2001), and Marku Eskilenen (2001) established ludology as key term in the field, and clearly

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[7] Indeed, this is all rather similar to a founding moment in film scholarship in which critics at *Cahiers du Cinema* used their platform as critics to establish the values they found to be worthwhile in films, whilst demoting those filmmakers they felt deviated from said values as *cinema du papa*, before entering into the field as filmmakers of the new wave and benefiting from the discursive space they had cleared for themselves.

positioned it in opposition to narratology. In a piece entitled 'Games Telling Stories?' Jesper Juul, for instance, questions whether games should be studied for their stories at all and makes this an issue of theoretical import of the emerging field. Whilst he grudgingly concedes that "some games *use* narratives for some purposes", he problematically presents this question as a zero-sum game in which one side wins and the other loses. Rather than see narrative and gameplay as potentially connected on some level, as the founding texts of the field explored above cautiously concluded, Juul suggests that they are radically opposed and furthermore implies that narratology has no place within the new theoretical framework they are building and will be a perspective better left to "existing paradigms" (2001).

But it was the editorial to the same issue by none other than Aarseth himself that provided the biggest statement of intent. Provocatively titled 'Game Studies Year One' (2001)[8] and evoking the rhetorical form and tone of a manifesto with a discernible emphasis on revolutionary or combat oriented terminology, it sought to force home the import of the "struggle of controlling and shaping the theoretical paradigms" (2001). Significantly hardening his position in the few years since *Cybertext* was published, Aarseth, who had notably also turned his back on the previously much lauded hypertext genre noting that "very few texts actually use the nonlinear possibilities of the technology" (2001), now turned his attention fully to videogames as the most overt expression of his concept of the cybertext and demands of ergodicity as the idealised form of games. And for Aarseth their primary characteristic is now their simulational nature, in sharp counterpoint to their textual qualities:

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[8] This attempt to break with the past couched in violent rhetoric is characteristic of the manifesto form of modernist art (Marinetti, 1909; Tzara, 1918), which attempts to clear the ground and usher in a new era via an absolute break with the past. The allusion to 'year one' in the title is also clearly reminiscent of the imposition of the Republican calendar under the French revolution (abolished by Napoleon after his coup) and the 'year 0' implemented by the Khmer Rouge during their takeover of Cambodia in 1975.

The simulation aspect is crucial: it is radically different alternative to narratives as a cognitive

and communicative structure. Simulations are bottom up; they are complex systems based

on logical rules. (Aarseth, 2001)

Later work by Aarseth continues to emphasise the specificity of this aspect of videogame modality

calling it "the hermeneutic Other of narratives" (2004), in much the same way it was noted above

that hardcore discourses surrounding normative play that were most strongly embodied in

Gamergate position females as gaming's ontological Other (indeed I will discuss below there is a tacit

link between these two disavowals). The most extreme form this argument takes, perhaps, are the

claims made by Aarseth and James Newman (2004, a British ludologist) over Lara Croft's body not

mattering to them in slightest when they play *Tomb Raider* (Core Design, 1996). As Aarseth

provocatively proclaims:

The dimensions of Lara Croft's body, already analyzed to death by film theorists, are

irrelevant to me as a player, because a different-looking body would not make me play

differently . . . When I play, I don't even see her body, but see through it and past it.

(Aarseth, 2004, p. 48)

Newman agrees, arguing that when the player inhabits a character as an avatar any characteristics

that might have been present in a non-interactive cutscene disappear, with Lara becoming a mere

token, a purely functional "sphere of action" (2004, p. 129). Aside from the clearly problematic

nature of two male game scholars writing off the issue of gender from their own position of privilege

(McIntosh, 2019), this 'gender-blind' reading speaks to the formalist tendency in extreme ludologist

position to dismiss utterly the wider cultural contexts of play and, indeed, the entire sociopolitical

sphere including a tradition of feminist critique (Kennedy, 2002; MacCallum-Stewart, 2014; Mikula,

2003; Schleiner, 2001), a point made recently by Soraya Murray who, like me, sees here an attempt

to "wrest video games from narrative-based interpretation, identifying them as self-contained forms – a 'new material technology' – as opposed to a continuation of story (with its attendant representations) in interactive form" (2017, p. 133).

Highly evident in Aarseth's piece, for example, is the disdain for humanities disciplines such as 'film studies' that are replete with ideological critiques of the nature of visual representation, and we might extend this disregard to cultural studies since, although she is curiously not mentioned directly, Judith Butler's classic feminist work *Gender Trouble* (2006) provides a structuring absence since it is clearly being parodied by the title of Aarseth's piece: 'Genre Trouble'. Indeed, the outright dismissal of issues of sexualisation regarding Lara's design can be read as an implied dismissal of feminism as a whole. For Esther MacCallum-Stewart, whose 2014 article attempts to unpick some of the complexities and ambiguities of gendered readings of Lara Croft, note that Aarseth's attempt to "disavow" her gender paradoxically draws attention to it (despite trying to unsee[9] her he "inescapably "notices" Lara"), and through the very use of her as an example highlights "her irrefutable position as a woman already considered out of place" (MacCallum-Stewart, 2014) in a medium dominated by male heroes (Kaiser, 2014). Seemingly for Aarseth and the other ludologists, proclaiming a 'game studies year one' is an opportunity to break with the "interpretive violence" (Eskelinen, 2001) of narratology, but ironically only through implementing their own interpretive violence of a complete fresh start. It can be interpreted as a startlingly conservative gesture; an escape from the critical tradition of feminism and cultural studies that had been gaining significant traction in the academy, by a group of predominant male scholars investing their attention in a medium with a predominantly male user base.

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[9] I take this unconventional verb from China Melville's novel *The City and the City* (2009), which imagines a palimpsest city that is ontologically and spatially divided between two rival cultures, each forbidden to acknowledge the other's existence for fear of committing 'breach'. This critique of ideological fundamentalism leads to much 'unlooking', 'unseeing', 'unrecognising' as the inhabitants perform phenomenological gymnastics.

This is fundamentally an example of the Barthesian process of myth making at play, an ideological sleight-of-hand in which the overtly political connotation that feminist or Marxist inflected intellectual approaches are deemed to be unwelcome,[10] is disguised by the denotative claims that characterise the gamic form as natural and therefore neutral in its political content. According to such a view we should not worry that the games industry is dominated by male-centric stories, dealing with male interests, featuring male protagonists and traditionally played by male players, because these are all just shapes moving on a screen. It is in light of such claims that reveal the naïve apoliticism of the simulational focus of ludology, which disguises a more deliberate and intentional exclusion of progressive political frameworks, that Dovey and Kennedy have urged for the relinking of the field to the emancipatory agendas of feminism and cultural studies via a rejection of the formalism of the text in favour of a turn to anthropological and sociological approaches that factor in the player community and the industry context:

> The application of anthropological theories of play together with an understanding of the functions of play within contemporary capitalism both imply that we must find a way to draw the computer game back into the realm of social semiotics. (Dovey and Kennedy, 2006, p. 101)

More recently still, Aubrey Anable has tackled the sins of orthodox game studies to make a similar claim that game studies has traditionally struggled with issues of representation. Like me, Anable sees this as a product of the "ludology versus narratology hangover," in which "computation/representation has become the structuring binary for game studies" (2018, p. 50). Because representation is bound up in narrative terms it is dismissed along with wider cultural concerns these speak to, just as Newman and Aarseth dismiss Lara's body. According to Anable,

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[10] We see the same impulse in the Alt-right's reductive and anti-intellectual dismissal of all humanities disciplines they do not agree with under the rubric of 'cultural Marxism'.

under the ludological orthodoxy: "bodies, all the ways their surfaces continuously signify, and the ways they are mediated through representations are rendered by these discourses as merely 'surface effects'… as retrograde throwbacks to cultural studies and identity politics" (Ibid., p. 55).

Whilst Aarseth delivers the manifesto-like call to arms of the movement, it is Markku Eskelinen, whose piece 'The Gaming Situation' in the same issue provides the most fundamentalist expression of ludology's formalist reductionism. In it he seeks to demonstrate the gulf between stories and games by surveying "the most crucial and elementary qualities that set it apart from dramatic and narrative situations". His stated aim is to "annihilate for good the discussion of games as stories, narratives or cinema", which he relates to "uninteresting ornaments or gift-wrappings to games". Furthermore he relates stories in games to mere "marketing tools", thus suggesting narratologists are consumerist dupes, whilst also condescendingly claiming that game developers are confused about the role of story and are thus obstructing the medium from reaching its potential: "gaming mechanisms are suffering from slow or even lethargic states of development, as they are constantly and intentionally confused with narrative or dramatic or cinematic mechanisms" (Eskelinen, 2001).

Whilst it might be considered an overly charitable gesture in justifying the implicit hostility to feminism in this issue, another way of understanding the surprisingly ferocious and polemical tone of the debut issue is as a series of boundary drawing exercises for an emerging field attempting to find its voice (not to mention its institutional funding) and coalescing around the growing Scandinavian scene of ludology as the *de facto* centre of European game studies. In such an exercise, the inherent biases can perhaps be understood as significantly overstating the ludologist position, which had already been introduced with far more willingness to compromise in *Cybertext*.

Building on the understanding of group formation in the discussion of discourse analysis above, we can see how the debut issue of game studies provides a crucial platform for such a discoursive

boundary drawing exercise, delineating the relationship between ludology and narratology, and implicitly the attendant values of play or the correct ways of approaching games as players and scholars. Such language is used to discursively enframe the field of game studies and its community, and as James Paul Gee stresses such language is inherently political because it is bound up in the allocation of social goods, and that such "social practices always have implications for inherently political things like status, solidarity, the distribution of social goods, and power" (Gee, 2014, p. 87). Bruno Latour takes this idea even further in extending a definition of politics to reimagine it as a functional aspect of almost every sphere of social life:

> For any aggregate, a process of redefinition is needed, one that requires curved talk to trace, or temporarily to retrace, its outline. There is no group without (re)grouping, no regrouping without mobilizing talk. A family, even an individual, a firm, a laboratory, a workshop, a planet, an organization, an institution: none have less need for this regime than a state or a nation, a rotary club, a jazz band or a gang of hooligans. For each aggregate to be shaped and reshaped, a particular, appropriate dose of politics is needed. (Latour, 2003, p. 149)

I take my understanding of politics from Latour's broad understanding of it here as a discursive modality that is called upon whenever a social grouping is formed, reformed, tested or indeed anytime its boundaries need to be retraced in order to form a new inside/outside relationship, and see this debut issue of game studies as a formative moment in the field as one such dramtic instance. In short, I want to suggest instead that the narratology/ludology divide largely became an event because of the polemical positions taken by ludologists, discursively defining narratologists as an oppositional Other to their own project. By exaggerating their arguments to suggest they only cared about narrative to the exclusion of all else, ludologists slowly constructed and maintained an idea of narratology as a strawman that gave the nascent field a dramatic polemic debate to coalesce around. When Gonzalo Frasca later attempted to redefine the terms of the debate once more he

states that the narratologists 'didn't turn' (Frasca, 2003), perhaps it is because they never existed in the exaggerated form that ludologists like Eskelinen continually imagined them. Aarseth, for instance, sees it as ironic that only ludologists seem to deploy traditional narratological theory (Aarseth quoted in, Murray, 2013), but Murray argues that what this really reveals is that it is only the ludologists who are obsessed with a narrowly defined 'narratology' that they associate exclusively with the old fashioned sounding threat of 'literary theory'. The greater irony is that narratology itself falls under the same classificatory efforts the ludologists were undertaking in their taxonomies of games and play, with Murray pointing out that their categorisation of narratology is a mischaracterisation of the work that writers such as she and Jenkins were trying to achieve in positioning games within a larger cultural studies paradigm (Murray, 2013).[11]

In short this is a particularly potent form of Latour's understanding of group formation around a victimised anti-group, the academics most often left on the other side of the boundary *gamestudies.org* was busy creating were the narratologists. Murray links this reactionary attitude to literary theorist Harold Bloom's 'anxiety of influence', where the emergence of an innovative new idea is enshrined in a deliberate and strategic mischaracterisation of the field against which it rebels, which Bloom (1997) calls a 'map of misreading':

> Narratology is a category of interest to the computer game formalists. It represents the authority against which they have rebelled, the thing that must be repudiated in order for their own interpretation to have meaning. (Murray, 2013)

The myriad representational approaches that are routinely and dismissively subsumed under the heading 'narratology' - cultural studies, media studies, gender studies, literary studies - are

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[11] Indeed, in a particularly accusatory response to his essay 'Game Design as Narrative Architecture' by Markku Eskelinen, Jenkins responds in turn with disbelief: "I feel a bit like Travis Bickle when I ask Eskelinen, 'Are you talking to me?' For starters, I don't consider myself a narratologist at all." (Jenkins, 2004b, p. 121)

mischaracterisations of a complex field that coalesces around cultural studies belief that popular

cultural forms are saturated with meaning and ideology (Dovey and Kennedy, 2006, p. 2; Hall, 2007;

Williams, 2008). But since dismissing these charged concepts directly would appear reactionary in an

academic framework that has focused on unpacking and critiquing such terms for the last half a

century, the ludologists use the allegorical threat of narratology as what Barthes would refer to as an

alibi in which "the meaning is always there to present the form; the form is always there to

outdistance the meaning" (2009a, p. 123). To dismiss narrative is, therefore, a sublimated form of

dismissing ideology (which explains the allergic reaction to ideology Kunzelman and Lutz still find in

works embedded in the European formalist tradition of game studies). It is similar, in essence, as the

common and deeply reactionary claim heard by many gamers across the internet that politics should

be excised from an appreciation of games, as though games in their essence were ideologically

neutral carriers of ludic experience (see Anable, 2018, p. xvii for an account of this).

In a timely revision to her classic *Hamlet on the Holodeck* (2017), Murray characterises the attacks

from Eskelinen in light of the dominating strategies observed of toxic forms of masculinity in the

internet's manosphere (Marwick and Caplan, 2018), stating: "the contemptuous tone and personal

nature of the rhetoric addressed to me, which sought to delegitimize and silence rather than to

engage, also suggests biases linked to nationality and gender" (J. H. Murray, 2017, p. 190). Whilst

ludologists were typically European and male, narratologists typically emerged from the American

academic scene, influenced more by the pragmatism of John Dewey and Charles Sanders Peirce

compared to Europe's grounding in poststructuralism, and contained far more prominent female

voices (Murray, 1997; Ryan, 2003). Traced to its logical extreme (and in many ways Eskelinen's piece

is that logical extreme), the ludology argument is shown to be a highly conservative, controlling and

exclusionary discourse, which Murray rightly links to "the frenzied refusal of interpretation that has

greeted feminist game criticism in recent years" (J. H. Murray, 2017, p. 193). Reflecting on this piece,

it is Henry Jenkins who best articulates the hypocrisy of this position:

Eskelinen is involved in a particular kind of "game" - defining and defending the borders of

an emerging academic discipline - and he is doing so according to some traditional rules:

define terms, lay down axioms, cite core theorists, and then engage in debate around those

various abstractions. We might call this game "my paradigm is bigger than your paradigm,"

or "my theorist can beat up your theorist." (Jenkins, 2004)

If Eskelinen can be said to be playing by recognisable (if rather juvenile) rules, Gonzalo Frasca,

another contributor to the debut issue of Games Studies, certainly isn't. Two years later in a blog

post that can only be called revisionist in its approach to history, Frasca questions whether the

debate ever took place at all or whether it was a structuring myth of the discipline, whilst somehow

simultaneously still subtly and successfully positioning the ludologist position as the correct pole of

that imaginary debate throughout the article (the debate didn't happen, but we were still right).

Although the article, disingenuously called 'Ludologists Love Stories Too' (2003), the title itself subtly

creating a sense of victimhood, has the stated aim of redressing certain misunderstandings it is

actually an act of moving the academic goal posts mid debate. Frasca achieves this by changing the

terms of definitions (suggesting that it might be better to call narratologists, narrativists), selectively

quoting his opponents, and downplaying some of the more radical positions taken by his colleagues

(notably Eskelinen).

Frasca insists that the characterisation of ludology as being opposed to narrative in absolute terms is

a misunderstanding of the debate as it occurred, although I have clearly shown the reverse to be

true: that it is the ludologists who deliberately mischaracterised the narratologist position. Indeed

the routinely polemic nature of the ludologist position, plain throughout the debut issue of *Game*

Studies places this beyond doubt. Rather oddly he goes on to insist that Ludology is also a misnomer

not perpetuated by he or any of his colleagues, even though he runs a blog entitled *Ludology.org* on

which this very piece is published and a footnote from the editors of First Person, Noah Wardrip-Fruin and Pat Harrigan (Jenkins, 2004a, p. 129) ratify a claim from Eskelinen that it was indeed Frasca who introduced the term in the Cybertext Yearbook in 2000. Regardless it was a term that had been in wide circulation beforehand, though he insists it is an oversimplification, before simplifying it even more (and in doing so further naturalising it), by saying it is interchangeable with game scholarship in general: "a ludologist is simply a game scholar" (Frasca, 2003). Such a universalising statement rhetorically positions ludology as coterminous with a 'correct' and 'authentic' games scholarship, and is another form of what Barthes's seeks to expose in his work as ideology attempting to masquerade as the historical record by enacting a process of naturalisation via covering up its trace in history. Such a reimagining of the term attempts to place it beyond reproach; reconstructing it as the idea of a seemingly neutral scholar that is strikingly similar to the discursive claims of the 'gamer' as a naturalised category rather than one historically formed through commercial and social processes as shown by several scholars (Anable, 2018; Chess, 2017; Crogan, 2011; Dovey and Kennedy, 2006; Keogh, 2018a). Frasca is here caught with his hand in the semantic cookie jar, in the process of retracing the boundaries of the ludology/narratology grouping as a form of gaslighting the narratologists (as if to say: 'Don't you remember, we liked stories all along. It was you that was so belligerent about rules…').

GENDERED PLAY AND INDUSTRY THEORISING

Whilst narratologists draw ludologists ire by linking games to theories and insights from previous media forms, the ludologist position revelled in isolating the field by creating strict definitions of what games were (rule sets) and weren't (stories). For instance, the so-called 'classic game model' put forward by Jesper Juul is one attempt to synthesise numerous previous definitions into a totalising and universalising ur definition according to which:

A game is a rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable. (Juul, 2003)

Significantly Juul places this model in opposition to the "common" tendency "of describing games as fictive worlds" (Ibid.), putting it in clear opposition to the narratologist position. This model drew on several earlier definitions, many of which were isolated and plucked out of context of the containing work. For instance when visiting Salen and Zimmerman's *Rules of Play*, a six hundred page treatise of spectacular scope and variety, Juul picks up on their definition of a game being "a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (Salen and Zimmerman, 2003, p. 80), rather than their much looser definition of play as "free movement within a more rigid structure" (Salen and Zimmerman, 2003, p. 306), which would seem too ambiguous and even paradoxical[12] to fit Juul's system. Further he draws a definition from Avedon and Sutton-Smith's *The Study of Games* that define them as the "exercise of voluntary control systems in which there is an opposition between forces, confined by a procedure and rules in order to produce a disequilibrial outcome" (Avedon and Sutton-Smith, 1971, p. 7), rather than their later comment that suggests that what constitutes a game is largely in the eye of the beholder:

"Each person defines games in his own way – the anthropologists and folklorists in terms of historical origins; the military men, businessmen, and educators in terms of usages; the social scientists in terms of psychological and social functions. There is overwhelming

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[12] Indeed, putting my own cards on the table this is my favourite definition of play for its loose, paradoxical nature: how can there be both 'free movement' and a 'rigid structure'? The beauty is it doesn't prescribe how rigid the structure needs to be nor how free the movement but recognises both the agency of the player and the constraints of the system.

evidence in all this that the meaning of games is, in part, a function of the ideas of those who think about them." (Avedon and Sutton-Smith, 1971, p. 438)

Selective citations not-withstanding, the formalist taxonomies created by ludologists, like this one, were still constantly frustrated by games that didn't seem to fit the model – such as the immensely successful *The Sims* (Maxis, 2000-) series or even tabletop games, both of which Juul considers edge cases. The only result in such a clash between prescriptive theoretical models and material reality is to adapt the definition or attempt to dismiss the challenging edge cases by characterising them as 'not real games' (Consalvo and Paul, 2019). As will be seen in chapter 4, the 'walking simulator' genre is only the latest high-profile victim of this impulse, demonstrating that little has changed since Dovey and Kennedy first made this observation.

It is unsurprising that *The Sims* should represent such an edge case because it is almost unique in being both a successful and long running series with an unusually high proportion of female players and developers (Prescott and Bogg, 2010, p. 143). This impulse to downgrade *The Sims* from game status goes back to the founding moment of ludology, with Gonzalo Frasca (2001) dismissing *The Sims* as an embodiment of a "consumerist ideology" in his review of the game for the debut issue of *Game Studies* (it is interesting indeed that The Sims should be the only game reviewed in this manner in the opening issue). Indeed others have cautioned against such superficial readings, noting that the game also operates with a satirical, parodic tone that dismantles or questions these very notions (Flanagan and Nissenbaum, 2014, p. 10). Given that as a series it pre-exists the emergence of the casual gaming sector, which is the point at which prevailing wisdom sees women as entering games culture *en masse* (Juul, 2012), *The Sims* provides an inconvenient truth to orthodox game studies: that women can not only be interested in games (albeit in different kinds of games than the ones ludologists want to focus on), but that this was always so.

As a result of this The Sims, and more open-ended and affective games like it, are consistently side-lined in ludological models making them seem like "deviancies" or that they "are not really games and their players are not really gamers" (Dovey and Kennedy, 2006, p. 6; Fullerton et al., 2008, p. 1). Indeed, designer Will Wright's position that *The Sims* is more of a software 'toy' than a game is consistently drawn upon to prove this (Pearce, 2002; suellentrop, 2007), in what has to be one of the rare instances that orthodox game studies considers the statements of designers from within the production context it is, perversely, only to dismiss the kind of game that would otherwise challenge its foundations (at all other times the ludologist position tends to treat game developers as largely irrelevant to their interest in the formal objects of play). The developer and Women in Games activist Sheri Graner Ray also notes this tendency to dismiss The Sims; discussing a panel on which she was invited to discuss game design but where the moderator had not considered an alternative model of games beyond those based on competitive struggle. When challenged by Ray during a pre-panel briefing, the moderator closed down the possibility space of both the discussion and the range of games by responding that "for the purposes of their panel presentation that day, *The Sims* and other games like it would not be mentioned" (Ray, 2004, p. 42). This is an extraordinarily vivid account of an exclusionary mechanism at play, not in games academia or even in a firmly industry context, but in a space of interface between the industry and a wider public – a space that media anthropologists like John Caldwell (2009) and Sherri Ortner (2009) see as crucial zones for shaping an understanding of a medium's values and core culture.

In her anthropological work on the communities of play surrounding the short-lived MMORPG *Uru Live* (Cyan Worlds, 2003), Celia Pearce notes that this game, much like the title *Myst* (Cyan, 1993) on which it is based, drew a strong female cohort including many players who had played no other games in the genre. This was partly down, Pearce claims, to the game's focus on puzzle solving and sharing knowledge as part of a community which appealed more to its players than other combat-oriented examples of the genre. For Pearce, the tendency to valorise games of skill, competition and

conflict over more experiential games driven by socialisation, collaboration and exploration comes down to a tradition of prioritising the rule-bound object of the game over the more subjective experience of play in game studies, something which I illustrated above in showing how Juul takes his definition from Rules of Play from the section on games as opposed to the broader consideration of the play impulse. Pearce says:

> The friction between games and nongames has also been deeply embedded in discourses among game designers, reviewers, and scholars, who tend to valorize those play experiences defined as "games" over those which are characterized as open-ended play spaces or sandboxes… The game bias is deeply embedded in the discourses of technoculture and digital media, as epitomized by the very naming of the discipline "game studies," as opposed its anthropologic antecedent, "play studies." (Pearce et al., 2011, p. 27)

This would all appear to tally with Dovey and Kennedy's insights that the games that tend to deviate most from the ludologist's normative typological models of gameplay tend to be those that attract a large female audience (2006, p. 37). Despite being highly simulational, an object of praise for Aarseth, games like *The Sims* are too open ended with not enough in the way of goals or struggle to satisfy Juul's model of play, and *Uru* is too collaborative with little in the way of competitive struggle to speak of. In light of these observations the classic game model and rigid classificatory systems like it start to look a lot more masculine in their implicit values. Indeed, these is evidence of a tendency (discussed below) in ludology-oriented game studies theory to perpetuate and extend the unquestioned presence of the male gamer as a norm (Fron et al., 2007).

For some writers this male-centric bias comes down to the very virtual spaces of games, which are themselves gendered in terms of their design and modes of access. In his essay 'Complete Freedom of Movement', for instance, Jenkin's argues that children's access to spaces have always been

"structured around gender differences… [and] such gender differences in mobility, access and control over physical space increases as children grew older" (Jenkins, 1998). In many cases these socially constituted gender roles and spaces, which align the outdoors for boys play and the domestic sphere for girls, have been replicated in the virtual spaces of games. Even well-meaning attempts to make games aimed at female players, such as Brenda Laurel's Purple Moon studio, still enforce these stereotypes, giving girls animals, kitchens and gardens to tend to whilst boys take off on far flung adventures. On its most fundamental level, Henry Jenkins characterises videogames as 'digital backyards' that allow children the vital opportunity to "transcend their immediate environment" (Jenkins, 1998a, p. 264), linking the virtual experiences games give children today to the 19th century outdoors oriented boys culture which took place in real space, but are increasingly inaccessible in crowded cities.[13]

In another essay the Ludica collective (Fullerton et al., 2008) write about the need to create more 'androgenous spaces' in games, which instead are typically oriented around masculine approaches to game design. Fullerton et al. extend a tradition of critiquing modern Western spatialisation in terms of patriarchal control into the virtual space of games, finding them to be apt reflections of their real world counterparts: that is to say "overwhelmingly Western, Cartesian and male" especially in their tendency to be typically built around competitive spaces of conflict – "designed for battle" – and ultimately conclude that such design "speaks to a predominantly male concern that space is potentially dangerous and always contested" (Fullerton et al., 2008, p. 1). Such a concept can be traced back to the development of linear one point perspective during the Renaissance, which saw the solidification of the modern, rational world view; an ordered, dominating gaze that placed (European) man at the top of the hierarchy of life.

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[13] Indeed, Gordon Calleja's (Calleja, 2011) recent book *In Game*, reinforces Jenkins' claim that digital games constitute a kind of 'digital backyard' in increasingly crowded cities, as it begins with a personal anecdote of the author spending his childhood playing football on the streets of Malta, dodging cars, before digital football games on home consoles allowed he and his friends to take their play indoors.

Linear point perspective was a way of mathematically replicating the world on a two-dimensional

picture plane the overall effect being, according to art historian Robert Hughes, that "perspective

gathers the visual facts and stabilises them. It makes a god of the spectator who becomes a person

on whom the whole world converges. The unmoved onlooker" (Hughes, 1979). Such an ontological

relationship to space is reinforced in the first person perspective of the FPS discussed above, which

Alexander Galloway finds so emblematic of games culture and its tendency to put the player in the

centre of the experience, but also the mathematically qualities of linear perspective are embedded

in many of the 3D software programmes that games are created on, such as programmes for

blocking out virtual environments like *Sketch Up* (Trimble Inc, 2000-) or creating 3D assets like

Blender (Ton Roosendaal, 1998), which allow for full manipulation of models in perspectival space

and present their interfaces as strict grids based on x, y and z axis.

The art historian Erwin Panofsky (1997) was one of the first thinkers to link linear perspective as the

core element of a particularly rational, modernist way of looking at and dominating over the world.

In such a system, the viewer is privileged in the sense that the spectator's eye is the point at which

reality is viewed.[14] The type of gaze perspective gives is a dominating gaze – one that allows the

Western viewer to control and master the world, as a result of which it is often seen to underpin the

project of colonial domination that was concurrently unfolding across the globe. For instance, in her

investigation of colonial travel literature *Imperial Eyes*, Mary Louise Pratt shows how the authors of

such works tend to possess the land they are observing. These books position the imperial power as

the rightful controllers of the land and they tend to exclude the native population from the

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[14] Panofsky is at pains to point out that the ontological assumptions that underpin linear point perspective are
flawed, since they are based on the perspective of representing unmediated reality through a single unmoving
eye as the point of ingress ignores, which fundamentally ignores certain biological characteristics of vision:
that human eyes are spherical not flat (which leads to distortion of lines not present in perspective paintings,
which assume instead a mathematical precision embodied in the notion of the vanishing point as the point on
which all lines converge) and also that humans have two eyes giving them binocular vision (as opposed to the
monocular singular point of view of perspective).

description so that "the landscape is written as uninhabited, unpossessed, unhistoricized, unoccupied even by the travellers themselves" (Pratt, 1992, pp. 51–52). Pratt calls such rhetorical acts 'claims to innocence', devices which use such naturalising and mythologising aesthetics to present imperialism as a humane and necessary project. This in line with the general ideology of the civilising mission, which Osterhammel (2005) argues is perversely maintained as the grand moral justification of the entire colonial project – the notion that Europe was bringing the fruits of a more enlightened civilisation to up-lift the primitive societies of the earth – even during moments when the ideology's barbarism was plain for all to see. In a conversational inter-disciplinary article between Jenkins and Mary Fuller, a scholar of literature, the pair discuss the highly masculine notions of the mastery of space and the challenge of 'self-control' as a key motivational characteristic of games, connecting this to a similar tradition of American writing about the wilderness "ambiguously as a place of acquiring mastery and of being mastered" (Fuller and Jenkins, 1995) and underpinned by the notion of manifest destiny.

In her book *Gender Inclusive Game Design*, Sheri Graner Ray gives an early industry attempt to challenge some of the prevailing male-centric notions of game development noted above and offering a set of guidelines for breaking with such models. As might be expected some of these suggestions focus on the representational qualities of the design, with Ray expressing the importance of avoiding character designs that sexually objectify (Ray, 2004, p. 21), instead urging developers to introduce more believable female protagonists (Ray, 2004, p. 25), but much of her advice is centred on the game's formal characteristics. Ray draws on Sherry Turkle's (2005) ground breaking enquiry into gendered uses of technology to explore how female users prefer 'soft' rather than 'hard' relations to the computer, for instance she notes that female players are more inclined to work with the computer rather than see it as a foe to be mastered (Ray, 2004, p. 11), leading her to suggest developers do not hide information (like secret moves in fighting games), and to clearly communicate objectives, since female players had less sensitivity to risk taking (Ray, 2004, p. 75) and

also liked to know why they were doing something in advance. The tendency to treat the computer as a foe to be overcome, tallies with the kind of mastery that Henry Jenkins' (Fuller and Jenkins, 1995; Jenkins, 1998a) critiques as the central concern of videogames. Indeed, the kind of empowerment typically given to the player can be seen in the emphasis most theorists give to what they perceive to be core traits of the medium, such as notions of interactivity (Aarseth, 1997; Eskelinen, 2001), configurability (Friedman, 1998), or player agency (Murray, 1997) all of which place the player in a 'hard' or dominating position vis-à-vis the text.

According to Ray female players prize activities over challenges, but she notes such elements are often considered an afterthought for designers or are the first thing to be cut (Ray, 2004, p. 11), also they were frustrated if they found games overly punishing, leading Ray to suggest that the consequences for a game should be an opportunity for encouragement (Ray, 2004, p. 13). Because female strategies for conflict resolution differ from the aggressive and competitive approach males favour, she suggests avoiding solely zero sum forms of conflict in favour of situations which allow for other approaches including diplomacy, compromise or other indirect forms of conflict (Ray, 2004, p. 43). Finally, and most importantly for this thesis, Ray claims (as does Fullerton et al.) that female players prize emotional engagement through narrative noting that games with a strong story and deep player psychology "have historically had a higher percentage of female players than the market average" (Ray, 2004, p. 55).

Whilst some of this advice might appear reductive in its own way, after all Jesper Juul's (2012) more recent work on casual games has problematised the notion that women do not like challenge or confrontation in design, and such claims that women are naturally attuned to certain types of game or stimulus for deep seated genetic reasons also problematically smacks of biological gender essentialism even if it is being used as a corrective by these authors to challenge deeply ingrained masculinist notions of play and game space. Cultural studies would argue that gendered tastes are

largely socially constructed, as much as Bourdieu (2010) argues class based tastes are, as indeed

Shira Chess (2017) has shown in her book on the topic, which argues that through developing a kind

of imagined female player identity, the industry constructs that player as much as it describes them.

For instance, it has been noted in rich ethnographic studies of children' tastes that these are defined

and reproduced to a large degree by the process of socialisation undertaken in school (Cann, 2018)

or through interaction with evocative objects like electronic games and other toys (Turkle, 2005),

rather than as Ray claims through the kinds of evolutionary traits that persist from our hunter-

gatherer lifestyles. In short gendered approaches to play are largely cultural constructs, perpetuated

by social mechanisms, rather than genetically hardwired predispositions. Perhaps Fullerton et al.'s

(2008) notion of a more androgynous approach to play is more fitting because it recognises the

fluidity of gendered experience between the two sexes rather than seeing them as a binary, as per

the work of Judith Butler (2006) and other contemporary feminists.

These doubts acknowledged, this book can still be seen as an important early document attempting

to rethink the centrality of design assumptions, and crucially one emerging from within the industry

itself. The reason I have spent so long overviewing its argument is to demonstrate the significant

similarities with the academic critiques explored above. This is clearly more of an industry text than

a scholarly work; something that is particularly evident in its citational apparatus which, as is

curiously typical of games industry texts in general, typically references psychological studies[15] or

empirical surveys conducted by the author herself. Significantly, then, although it is a work

somewhat divorced from academic traditions in game studies, it comes to strikingly similar

conclusions to the scholarly texts operating in traditions of gender studies, cultural studies or media

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[15] Curiously psychological disciplines are strongly represented in games industry theorising, no doubt due to the medium's interest in optimising a player's mood and its tendency towards positivism and experimentation. This tendency can clearly be seen in the enduring popularity of the model of *Flow* from management psychologist Mihaly Csikszentmihalyi (2002) and the way many other industry writers have been influenced by cognitive psychology (Koster, 2004) and positive psychology (McGonigal, 2012).

studies from the humanities context. I therefore want to position this work as a key example of a concept that will be central to this thesis: that of industry theorising.

John Caldwell, whose work explores film and television production cultures in Los Angeles using an ethnographic approach to media work, calls industry theorising "a kind of indigenous cultural theory that operates outside of academia" (2008b, p. 5), which is often reflective of a practical need for media workers to be able to "self-consciously articulate how and why they do things in the distinctive ways that they do, and to convince others of this logic as well" (Caldwell, 2008b, p. 115). In an important article assessing the benefits of considering such a topic in leading film journal *Screen* he reflects on the paradoxical nature of the film industry's common dismissal of academic work by the industry, on the one hand, and the intense internal theorising that occurs within industry but is often ignored as irrelevant by the academy on the other. Noting that such attitudes are due to the perception that theories developed by practitioners are too closely connected to, and therefore tarnished by, the commercial apparatus, Caldwell finds such scholarly dismissal "disingenuous and short sighted" (2009, p. 169). Indeed, as this comment suggests, the article is a bit of a provocation to its film studies audience because Caldwell sees cultural studies as a kind of 'straw man' and 'Other' to film studies (2009, p. 170), in much the same way that the discussion above shows it to exists in a similar relation to game studies. In contrast he believes that it is only by embracing this discipline (which has its roots in cultural anthropology) that the impasse in academic/industry relations can be broached. In an attempt to reconcile political economy approaches to documentation with cultural studies work in ethnography Caldwell states the need to "[get] rid of the false 'text-as-screen' versus 'context-as-industry' binary that tends to caricature 'state-of-the-field' debates in the humanities and the social sciences" (2009, p. 171).

In a move that perhaps recalls Henry Jenkins (1992) arguments about taking fan theorising seriously in a fan studies context, Caldwell notes that such industry theorising bears important similarities

with the intellectual labour of scholars and is potentially a valuable source of knowledge that should

be treated seriously (if not uncritically). For Caldwell it would behove academics to realise that they

no longer (if they ever did) hold the monopoly on screen theory,[16] and such industry theorising

occurs in many sites (formal and informal; internal or external) and is directed towards many

different ends. For instance, theorising about traditions of plot structure in a writers room has the

practical purpose of hashing out an idea, whilst discussing big picture impressions of the industry

during public lectures serves to cultivate cinephilic interests in the consumer base, a function that is

also performed by the pseudo-scholarly behind the scenes documentaries, directors commentaries

or accompanying materials serve in DVD releases. Industry approaches to theory vary in scope and

scale, sometimes addressing the same big definitional, philosophical or critical issues that academia

tends to focus on or, conversely, may even be something as simple as solving day to day challenges

in a creative medium.

For Caldwell industrial theorising is a crucial mechanism in which "media workers make critical sense

of their own screen practices to themselves" (2009, p. 168) that has been ignored by scholarship for

too long, but although he mentions 'new media' industries as a parallel site where such theorising

occurs he does not pursue this thought. Simultaneously it is noteworthy that due to the lack of

concern in game studies towards addressing the production context (something explored in the next

chapter), such industrial theorising is rarely analysed in any depth in game studies either. Part of my

concern with this study, then, is a) to extend Caldwell's notion of industrial theorising into game

studies by exploring how developers in specific game production cultures understand their

processes, thus picking up and building on his suggestion that the concept would be a valid point to

consider in new media industries; and b) to provocatively disrupt game studies prevailing interests in

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[16] Indeed, even many of the foundational texts in film studies were produced by journalists such as those at *Cahiers du Cinema* (Bazin, 2009; Truffaut, 2009) or by early practitioners (Eisenstein, 2014; Tarkovsky, 1989; Vertov, 1992), and the same is true of game studies with early theoretical works on the medium produced by Chris Crawford (2003), Raph Koster (2004), and more recently Tynan Sylvester (2013) and Robert Zubek (2020).

texts and players by applying this approach here, in much the same way Caldwell has shaken up the

screen-based formalism of film studies. My gambit is that industrial theorising is remarkably present

in all levels of the games industry; indeed it may be *even more* intensively present due here than in

the screen industries due to the faster rate of technical (and subsequently aesthetic) change in the

medium (Newman, 2012), combined with the relative youth of the medium, meaning that the rules

and conventions underpinning it are often in the process of forming or shifting (Cadin et al., 2006),

creating a movable feast for reflection that has resulted in a flurry of design guides authored by

developers at the coal face of industrial change (Adams, 2013; Crawford, 2003; Koster, 2004;

Macklin and Sharp, 2016; Newman, 2012; Rogers, 2014; Salen and Zimmerman, 2003; Schell, 2014;

Skolnick, 2015; Swink, 2008; Sylvester, 2013; Zubek, 2020).

Indeed, although he doesn't discuss Caldwell's work directly, in his discussion of what makes a game

designer, Casey O'Donnell indirectly cites such industry theorising as a key component of the identity

of such creative practitioners, observing that, "designers frequently had skills that seems to

transcend disciplinary boundaries, including analytical skills that allow them to deconstruct games,

examining their core elements and mechanics, and determine the underlying rules and structure of a

game" (O`Donnell, 2014, p. 45). Evidence of this kind of theorising was clear from my interview

corpus. For instance, that both macro and micro forms of theorising were present concerns for every

interviewee in some form. Indeed, it seems common for practitioners at all positions in the studio

hierarchy to possess a personal set of ideas about what games are or should be, which they use as a

general guide during production, whilst also modifying that master concept with discoveries they

make during specific instances of production. For instance, Ryan Payton reflected at length on his

fascination with the phenomena of players empathising with characters they were in control of in

games where "on paper I would expect it not to work, but it continues to work over and over and

over again for other games, so yeah I'm still very much like trying to figure this whole thing out"

[RP37]. Meanwhile his specific approach to designing the player's relationship to Hope in his game

set out to explore this phenomena by "giving her the sense of being a smart autonomous force to a certain degree, and then also giving the player the amount of control that they expect out of a videogame" [RP28].

Caldwell notes that industry theorising can sometimes even resemble the "analytic 'deconstruction'" (2009, p. 168) style accounts more common in the academy, which perhaps should not surprise us given how film workers are increasingly trained in art schools or specialist film academies where such theoretical 'contextual studies' modules run alongside practical tuition, teaching analytical skills beneficial to symbol producers such as semiotics and narratology. As Caldwell notes "university professors in film, media and cultural studies have educated many of the film and television professionals that make up these post-Fordist, contracted and outsources cadres" (2009, p. 169), a situation that raises ethical questions or, at the very least, conflicting feelings when it comes to them drawing on these same individuals as potential sources.[17] Efforts, like those of Ray's, to influence industry thinking on a topic provide specific, material instances of an attempt to both comprehend and take command of a discursive terrain, by speaking from a position of authority on design practices.[18]

Industrial theorising efforts like Ray's respond to O'Donnell's concerns that the industry's secretive culture and high propensity for employee churn and burnout precludes the development of institutional knowledge from veteran designers, and also push back against prevailing or entrenched tendencies in the larger community of practice. Although the industry sometimes appears

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[17] For instance teaching a student the importance of semiotics and then interviewing them in later years, after they are placed in the industry, to use their experience of utilising semiotics in production as proof of its importance, would seem an extreme (if unlikely) version of this compromise.

[18] Indeed, Ray's expertise and authority is profound. Not only has she worked for ten years in the industry, a significant stint for an industry well-known for burning out employees after a handful of years, including as a senior designer at Sony Online Entertainment, but she has amble experience as an activist as co-chair Women in Game Development Committee at the Game Developer Conference, Director of Product Development for female-oriented game studio Her Interactive and was the founder of Sirenia Software.

monolithic from the outside, it's important for game scholars to recall that it is still made up of thousands of passionate and highly creative individuals, and, perhaps that now more than ever, their efforts to steer the boat occasionally gain traction and open the door for new possibilities. The convenience of the dominant and normative paradigm of the gamer, for instance, allowed ludologists to emphasise mechanical complexity, or what Arseth calls 'ergodicity', as essential to the core definition of games at the cost of marginalising traits like narrative and sociality which female designers such as Sheri Graner Ray (2004), and Brenda Laurel (2011), and academics like the Ludica Collective, Celia Pearce and Henry Jenkins, associate with female gameplay tendencies and tastes.

THE LEGACY OF 'ORTHODOX GAME STUDIES' AND THE AGONISTIC FORMATION OF THE FIELD

Although the polemical violence of the ludology/narratology debate is less evident to us now as it recedes into history, statements from figures on both sides of the debate as it unfolded indicate its volatility, with Henry Jenkins referring to an exchange at a conference as a "blood feud" (2004a) and James Newman characterising the debate as a deep schism of the field that turned it into a "virtual battleground" (2004, p. 89). As such language indicates, and the revolutionary language of Aarseth's editorial for the first issue of *Game Studies* attests, the two sides of the debate are typically characterised as hostile and irreconcilably opposed, which mirrors the incommensurable nature of narrative and ludic appreciation of games they supposedly represent. The debate then is perhaps so potent and perennial because in its very form it plays into a core characteristic of games as '*agonistic*' battlegrounds that emphasise violence and competition (Fullerton et al., 2008). The notion of agon, sits at the heart of normative accounts of what constitutes a legitimate videogame within gamer culture, is worth unpacking here as part of this introduction's commitment to historicise the deep concepts that constitute the norms of gameplay.

The term agonistic is derived from Roger Caillois' (2001) understanding of *agon* as the chief of the

four categories that make up the notion of play, captures the qualities of competition, aggression

and struggle many still see at the heart of videogames which are characterised strongly by conflict

and the binary, zero sum outcome of victory/defeat (Aarseth, 1997; Costikyan, 2002; Juul, 2003). The

concept of the zero-sum game, which implies that the winner's gain is always equivalent to the

losers loss,[19] comes from the field of logic called game theory (not to be confused with game studies,

though here there is much overlap[20]), principally developed by mathematicians like John Nash and

used to prop up the coolly logical thinking behind the Cold War nuclear deterrent (Curtis, 2011). By

dint of the fact that the earliest games were assembled by bored or curious programmers or

ambitious grad students in the very same computer laboratories, at places like Stanford and MIT,

that undertook defence research contracts for the Pentagon, ultimately means that the birth of the

medium is a curious by-product of the military industrial complex and its mode of thinking. Indeed,

writers like Patrick Crogan (2011), Nick Dyer-Witherford and Greig de Peuter (2009) have also

exhaustively tracked gaming's interlinked emergence alongside the computing technologies of the

Cold War and their link to the military-entertainment complex, exploring how the medium inherits

something of the agonistic and zero-sum structures of game theory and the policy of mutually

assured destruction (MAD).

Game theory is essentially a means of mathematically mapping out the decision spaces of rational

human actors, as in its most famous model of the 'prisoner's dilemma' in which individuals are

incentivised to act out of self-interest, even though collaboration would be a net benefit to all. The

zero-sum impulse that underpins game theory maps well onto the idea that story and gameplay are

mutually exclusive in nature. For instance, speaking to the supposedly incompatible nature of game

and story, Stuart Moulthrop (2004) characterises the two modes of analysis via the divergent model

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[19] Alternate models include a positive-sum game (where both sides gain) or, indeed, the compromise.
[20] To paraphrase a neat encapsulation from Alexander Galloway, who was discussing the typically agonistic games of Sid Meier, in such a regime game studies begins to "look more like game theory" (2006, p. 101).

of two forking paths each leading to separate destinations. This visual metaphor, which itself draws on a tradition of understanding ludic storytelling via the metaphor of 'branching paths' (Montfort, 2005), perfectly reflects the zero sum nature of this situation where choosing one approach naturally excludes the other.

Written in 1958 Caillois' classic work *Man, Play and Games* ([1958] 2001) has enjoyed a huge influence on the first wave of game studies scholars and particularly ludologists. Building on the work of Dutch theorist Johan Huizinga ([1938] 2016), who famously posited games as a vital component in the creation of human culture, Caillois famously identified four ideal types of game, each named for Greek term:[21] *agon*, which broadly relates to the Greek notion of competition and struggle (the contests of strength and skill of the classical era and on which the spirit of the Modern Olympics drew); *Alea*, which corresponds to games of chance (for instance dice, which find their origins in gambling and divination); *Illinx*, which relate to a sense of vertigo Caillois evocatively describes as "voluptuous panic" (Caillois, 2001, p. 23); and *Mimicry*, basically games of pretend (for instance classical theatre or modern role play). But the categories that he created were not equal in his mind, rather, he argues that primitive societies predominantly follow types of play based on mimicry, alea and Illinx. Meanwhile he sees agon as a superior form of play associated with developed societies based on rationalism. Throughout his work agon is consistently linked to the idea of advanced capitalist and democratic societies (and their view of society based on competition, whether of businesses or political parties), whilst alea is aligned with divination, and mimicry and illinx get linked to the supernatural and pre-modern activities of tribal witch doctors and shamans.

Whilst these concepts are taught in game studies courses the world over as a foundational taxonomy of game types, what such primers ignore by taking the terms out of context of the greater

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[21] Indeed, there is a paper to be written on game studies classicist leanings, particularly in its persistent use of Greek (and occasionally Latin) terms and neologisms, as might be expected of a discipline with aspirational tendencies.

work is their extreme Eurocentric, imperialist and racist overtones. Indeed, for Caillois games are a means of 'diagnosing' the failings of a culture or establishing its 'moral character'; a phrase that echoes attitudes surrounding colonialism as a civilising mission. He says:

> a game that is esteemed by a people may at the same time be utilized to define the society's moral or intellectual character, provide proof of its precise meaning, and contribute to its popular acceptance by accentuating the relevant qualities. (Caillois, 2001, pp. 82–83)

For example, when unpicking the creative potential of agon and the destructive potential of alea Caillois ascertains that "the first attitude requires the development of personal superiority and the other requires one to wait, motionless and silent, for a wholly external consecration or doom" (2001, pp. 77–78), and the hierarchical relation of coloniser and colonised suggested by this statement is not hard to spot. Agon then is related to the development of liberal individualism, which is the gold standard of rational, modern subjectivity. Liberalism had become the dominant ideology of the emerging middle classes since the industrial revolution placed them firmly in the driving seat of wealth creation, and they used this power to challenge that of the absolute monarchies by supporting democracy and placing the ideal of human freedom at the heart of society. As historian of modernism Pericles Lewis summarises, liberalism was defined in economics by its support of "free trade and the unfettered development of capitalism" and philosophically by "[championing] the individual over the collective, reason over prejudice, and progress over reaction" (Lewis, 2007, pp. 12–13). But liberals also only believed in the freedom of a chosen few – typically white, middle-class men. Most believed women were not intelligent enough to be trusted with the vote and thought that non-white societies were incapable of governing themselves, an assumption that underpinned the paternalist attitudes towards the colonial Other, which Rudyard Kipling famously and arrogantly called "the white man's burden" (Lewis, 2007, p. 15).

Caillois' value-laden distinctions between types of game builds into Edward Said's famous notion of Orientalism, and one is left to wonder whether, if Said was as interested in studying games as he was literature, Caillois might not have served as a good example in his work. Orientalism is an ideological framework that underpins the development of Western liberalism to the extent that it provides a cultural 'Other' to contrast the enlightened European subject against. Europe came to define itself in opposition to the 'East', but it was always an imagined East constructed from the point of view of the West:

> The Orient has helped to define Europe (or the West) as its contrasting image, idea, personality experience… European culture gained in strength and identity by setting itself off against the Orient as a sort of surrogate and even underground self. (Said, 2003, pp. 1–3)

Europe forged its identity by developing a sweeping set of generalised myths about non-European cultures, expressed as a series of binaries in which European civilisation was taken as a rational and neutral default, against which other cultures were considered deviant, not unlike the edge cases in Juul's classic game model. In this way the Orient is an invention of the West, a 'system of ideological fiction' (Said, 2003, p.321), in which the positive notion of the West as "rational, developed, humane, superior" is built into the binary opposite of an imagined Orient as "aberrant, undeveloped, inferior" (Said, 2003, p. 300). Such a framework helps bolster the colonial system by justifying the subjugation of the imperial 'Other' within the agonistic logic of colonisation, as captured by Albert Memmi's (1990) classic portrait of *The Coloniser and the Colonised*, in which the colonised begins to internalise a sense of themselves as inferior.

Juul's pseudo-scientific gesture in building the classic game model, so characteristic of the overt positivism and structuralism of early game studies, is clearly following in Caillois' footsteps and echoes something of the rationalism that underpins liberal and neoliberal subjectivities. It not only

presents a rigid definitional boundary that plays into the ludologist project of field building, but, no-doubt unintentionally, perpetuates the ideological subtexts of Caillois' work, long unquestioned as a neutral foundation of theorisations of the videogame. Such orthodoxy results in what Haraway has called ''epistemological arteriosclerosis'' or a ''hardening of the categories'' (Haraway, 1997, p. 139), a set of unquestioned assumptions baked into the discipline allowing it to function as a black box.

Despite the continuing diversification of the field and the fact that many ludologists have turned away from the extreme implications of their early dogmatic positions, for instance Jesper Juul's later work *Half Real* with its central thesis that games are a combination of "real rules and fictional worlds" (Juul, 2011, p. 1) demonstrates a rapprochement and ultimately a fusion between narrative and gameplay, the rhetorical resonances of the ludology/narratology debate have undoubtedly exerted a massive influence on the field of game studies in its crucial years of development, and reductive and formalist understandings of the medium can thus be seen replicated in both industry and academia. It is still common years later to find books carefully articulating both sides of the debate and situating themselves between these perceived dialectical poles, thus perpetuating it as the structuring myth of the field rather than a historically contingent and discursive phenomena. In Tomb Raiders and Space Invaders Geoff King and Tanya Krzywinska acknowledges this as "one of the most controversial debates in game studies" and how they "seek to go beyond it" (2006, p. 4). For them games are "multidimensional experiences" and furthermore those experiences are mixed: "If core gameplay activity is privileged, as some argue it should be, as the feature that marks games out from other popular entertainment media, it never occurs in a 'pure' form, unadulterated by some other dimension" (2006, p. 5).

The tension between narrative and gameplay still exists in game studies as a kind of trace form of the debate, but in far less absolute terms. In a widely taught introductory coursebook on the subject, for instance, Frans Mäyrä builds on this notion by providing the useful, if limiting, metaphor of the

game as comprising of the aesthetic shell and the systemic core. The shell of the game refers to all the aesthetic elements that feed into a game and give it its identity, including visual design and narrative. Meanwhile the core – and this very term already implies its centrality and privileged nature in the dichotomy – is the rule set that puts those aesthetics in motion and underpins the player's mechanical engagement with the game, and thus is clearly aligned to the interactive, simulational or configurative elements of games prioritised by ludologists. However, Mäyrä's more sophisticated model insists that the core and shell are interrelated and "the identity of the digital game is inseparably tangled with many other factors, including the audiovisual design of its gameworld and its objects and inhabitants" (2008, p. 17).[22] Meanwhile Juul's classic game model continues to hold a lot of water in game studies, even in emergent areas like production studies. Indeed, in the introduction to their high-profile book[23] analysing the structure and formation of the games industry, Peter Zackariasson and Timothy L. Wilson draw upon Juul's model exclusively to quickly define their object (2012, p. 5), clearly demonstrating the ease with which it is so uncritically used as a shorthand to demarcate what a game is. This is all the more surprising in a work that is supposedly industry orientated, where one might expect some consideration of the ways the industry itself works to define games through its discourses and processes.

In her book *Literary Gaming* Astrid Ensslin is able to make the claim that game studies has moved from a first wave of broadly definitional scholarship with the aim of pushing for "game studies established as an academic discipline", to a "second wave of research dealing with more specific ludological and analytical concerns" oriented towards "individual games or franchises" (2014, p. 37). Such a moving-on would suggest finally leaving behind the ludology/narratology debate, but even here, in a book concerned with defining 'ludoliterary hybrids' "that [have] both readerly and playerly characteristics" (2014, p. 1), Ensslin continues to propagate the tension between gameplay and

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[22] Diane Carr et al. make a similar case for narrative and gameplay to be "interwoven" (2006, p. 44) in their introductory work on the topic.

[23] It was published as part of Routledge's extensive series 'Studies in Innovation, Organization and Technology'.

narrative as a defining paradox of the form claiming them to be "entirely different interactive, productive, aesthetic, phenomenological, social, and discursive phenomena" (Ibid., p. 38). Daniel Punday's recent overview of narratology in digital media goes to greater extremes in maintaining the not only the binary nature of the debate but in placing ludology as its positive term. It begins by utterly dismissing Janet Murray's work as idealistic, drawing on it precisely once in order to condemn it for producing "fanciful visions of future Narrative[s]" (2019, p. 1), before moving on to the more "rigorous" and level-headed approach to narrative conducted by Aarseth and other ludologists, who are drawn on throughout and are reified as "exactly right in their goals" (2019, pp. 11–12). He even echoes their polemical claim "not to allow literary models to "colonialize" or otherwise warp our understanding of what digital media can do" (2019, p. 1). Although it might seem odd to disavow the work of those explicitly positioned as narratologists in a monograph on the topic, I believe this shows the extent of the rising stock of ludology in game studies that it may be seen to hold the moral and intellectual high-ground even on the topic it seemingly rejects.

Whilst Ensslin curiously maintains the artificial ludo/narrative divide intact for most games in her work, particularly the commercial games that aren't a part of her study, she makes a specific space of exception for the privileged objects of her analysis that she characterises as 'art games', a category that overlaps considerably with the kind of indie games I focus on in chapter 3, but ultimately includes far more fringe works such as Interactive Fiction (IF), gallery works and hypertext poetry (recalling the focus of Aarseth's *Cybertext*). Ensslin places her objects of enquiry on a 'Ludic-Literary continuum' in which a "clash between reading and gameplay… render them closer to either the literary or the ludic side" (Ensslin, 2014, p. 6). Despite reimagining the ludology/narratology polemic as a continuum, this axis never-the-less maintains the now engrained implication that the two terms are mutually exclusive, with one decreasing as the other increases. As Ensslin categorically states above, games and narratives are fundamentally different and even when mixed retain their individuality within a suspension, rather than integrating in a solution. Indeed, the

maintenance of these boundaries are essential for Ensslin's theoretical toolkit of 'functional ludostylistics' to be successful, since it seeks to analyse discreet elements across the ludic-literary continuum rather than thinking how they might become true hybrids more in line with Donna Haraway's (1991) notion of 'the splice' a condition Keogh summarises: "that does not easily separate player from character, actual from virtual, real from fictional, story from game, embodied from textual, actual from passive, acting from interpreting" (2018a, p. 17).

One writer who made an early intervention to find a genuine compromise for the debate, and to present such a hybrid of ludic and narrative qualities, is Henry Jenkins, whose influential 2004 essay 'Game Design as Narrative Architecture' attempted to explore how the two aspects can be considered integrated, and introduces an important framework for thinking about how narrative can be materialised spatially within the structure of games. Indeed, the book that this piece appears in, *First Person: New Media as Story, Performance and Game* (Wardrip-Fruin and Harrigan, 2004), is significant in articulating the pervasive nature of the debate because it structures the book around ludology and narratology and by doing so explicitly centralises it as an engine for the nascent discipline. In its pages key narratologists and ludologists are placed in direct dialogue with one another, featuring prominent writers such as Janet Murray and Michael Mateas to argue from a narratological perspective and Espen Aarseth and Marku Eskelinen from a ludological one. Further, each article is appended by a critique from the opposing party, followed by a retort from the original author, giving an argumentative tone. In his contribution to the discussion, Jenkins starts by questioning the very terms of the debate, rightly noting that it "operates with too narrow a model of narrative, one preoccupied with the rules and conventions of classical linear storytelling at the expense of consideration of other kinds of narratives" and also that "the discussion deals only with the question of whether whole games tell stories and not whether narrative elements might enter games at a more localized level" (Jenkins, 2004a, p. 121). Instead of arguing whether videogames are or aren't narrative in absolute terms, Jenkins attempts to refocus the debate onto thinking about

how narrative might function uniquely within games as a spatially oriented form of storytelling, a concept that underpins the modern notion of environmental storytelling in game design, perhaps most famously expressed in Ken Levine's (2008) GDC talk about *Bioshock*, which introduced his ideas around 'push' and 'pull' narratives. Push narratives are more traditional cinematic forms of storytelling that are pushed onto a passive spectator (such as cut scenes, which can only be watched), whilst pull narratives are those the player actively pulls out of the game space through their own agency. Levine's oft cited talk is a key piece of industrial theorising and its similarities with Jenkins's thoughts on the matter further evidence a point I made earlier on about the relevance of such concepts to scholars (the line between academic and industrial theorising is sometimes fine indeed).

Similarly to Jenkins, Murray stresses the need to reject rigidly agonistic view of game studies that frames the debate as a competitive contest, an attitude that is often noted to characterise highly masculine game development working environments (Legault and Weststar, 2015), instead stressing collaborative approach that would seek to unify these too often excluded interpretive approaches:

> With students flooding our graduate and undergraduate programs around the world, they should no longer be confused by the appearance of an either/or choice between games and stories, or distracted by an unproductively sectarian discourse. (Murray, 2013)

Edward Soja's (1996) notion of 'critical thirding' perhaps offers a practical way out of this impasse by offering an approach for moving beyond the dialectic, not just by synthesising it without resolving its contradictions, but complicating and transforming them. This is a radically critical postmodern approach that explicitly seeks to overturn either/or binaries in favour of radically open and multiple 'and/but also…' trialectics, by introducing a third term that creatively disrupts the binary.

The third term that can be introduced between ludology and narratology I tentative call

'ludonarrative convergence,' since it playfully and critically rephrases the popular term

'ludonarrative dissonance' developed by game designer Clint Hocking (2007) on his blog *Click*

Nothing as yet another influential piece of industrial theorising. This phrase describes a disparity

between the narrative ambitions of a game and the activities players actually perform in its

gameplay. In the same blog, for instance, the concept was famously applied to *Bioshock* (2K Games,

2007), which according to Hocking on a thematic level critiqued Ayn Rand's philosophy of

objectivism in its model of the dystopian city of Rapture, but still required players to act out of

extreme self-interest throughout the game's systems in order to succeed (thus embodying a

libertarian self-interest that was intrinsically Randian).

Following Soja, then, this term[24] is not merely meant to summatively stand in for narrative and

ludology, or reject them entirely, but to point to a phenomena that is both between the two and

more complex than the sum of its parts. It refers to the complex interaction of gameplay and story

within the text, terms that are still understood to be in a tense relation but a relation that is

considered productive of new meanings rather than irreconcilable and isolatable; but also one that

describes the larger movements in the industry towards telling new stories within the field of game

development, and the way these stories are conceived and interpreted in light of dominant models

of play. As core characteristics of the videogame as cultural form, gameplay and narrative are here

considered deeply and inextricably interrelated. Mayra's core and shell, whilst a useful analytical

tool, collapses somewhat under the pressures of the gamic form constantly reconfiguring these

essential elements through complex and diverse forms of material practice as developers seek to

express themselves through this rapidly shifting medium. As Keogh asserts: "Videogames are not a

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[24] Semantically speaking the correct antonym to 'dissonance' would be 'harmony', but convergence is useful since it both demonstrates that this is not a simple reversal of Hockings term and also ties the notion directly to larger notions of convergence that writers like Henry Jenkins (2008) and Lev Manovich (2002) see as central features of new media forms like videogames.

core game wrapped in an interchangeable audiovisual skin; videogames are materially constituted by their audiovisuality" (2018a, p. 12). In this thesis I take this claim further, insisting that these terms can only be fully appreciated by examining their formation and uses within real networks of production, where we will see designers are very often concerned with exploring ways of creating such ludonarrative convergence.

In the following chapter I fully expand on my methodology and argue that actor-network theory (ANT) is not only a strong fit with the wider production studies paradigm (Caldwell, 2008a; Ortner, 2013), but that it is the ideal lens through which to view an industry in crisis with a multitude of competing groups and interest at play. Production studies is a methodological approach that many game studies academics have expressed the urgent need for (Banks et al., 2016) in recognition of the traditional neglect the field of game studies has held for developers. This very recent turn to production studies and ANT is driving a vital reorientation of the field around the material realities of production and away from the entitled centrality of the player or the text (Apperley and Jayemanne, 2012). Central to this approach is an understanding of how ideas, practices and texts are discursively co-produced in relational networks made of a variety of human and non-human actors which strengthen themselves by making associations and alliances. I also outline the process by which my interview data was collected and analysed and touch on some of the key issues raised by interviewees, and how they fit within the overall argument.

Chapter 2 draws on theories of political economy of the creative industries (Banks, 2007; Hesmondhalgh, 2013; Hesmondhalgh and Baker, 2011; McRobbie, 2016) to explore the unique characteristics of the games industry. Understanding the structural characteristics of the industry at large provides an essential foundation for the following discussion, providing a context for discussions of AAA and indie development. Of particular interest is how the individual stories games tell feed into larger narratives circulating within the industry in order to construct and maintain its

identity. John Caldwell calls such narratives 'trade stories' and the entities that carry them 'deep texts' (Caldwell, 2008a, p. 37). The structure of this chapter draws on the important work of Casey O'Donnell, whose book *Developer's Dilemma* (2014) is one of the only sustained anthropological studies of the industry to date. It reimagines four foundational myths of the industry identified by O'Donnell as examples of Caldwell's trade stories, which undertake important discursive work in not only forming a positive view of the industry, but in ensuring the constant churn of vital human resources necessary to keep the industry buoyant. Critically tackling each of these myths, allows me to highlight specific challenges the industry faces that must be overcome to create a more sustainable and equitable working environment, crucial to the development of new types of stories. These include the industry's highly successful resistance to industrial organisation, the deeply engrained culture of self-exploitation and toxic overwork called 'crunch', the blurring of boundaries between work and play often termed playbour (Kücklich, 2005), and the means by which it replicates itself through creating a specific type of neoliberal knowledge worker. The chapter ends with a case study of *Tomb Raider* (Crystal Dynamics, 2013), which illustrates the constrained nature of creativity as it takes place within the network of AAA studio.

Chapter 3 turns to the highly volatile indie sector and explores how its developers articulate themselves in opposition to the kinds of creative controls present in the AAA sphere. It explores how, ultimately, the indie sphere still exists in a position of heavy interdependence with AAA, and further how this feedback loop has become a vital structuring element of the industry at large. This chapter thus deals in depth with the thorny issue of what constitutes indie development in the first place and to what extent it can be understood as an emergent challenge to the dominant mainstream, reviewing new scholarship on this important phenomena (Grabarczyk and Garda, 2016; O'Donnell et al., 2018; Simon, 2013). Of particular interest here are the trajectories of developers like Steve Gaynor and Ryan Payton who transitioned from AAA to the indie sector, which helps to reveal the interdependencies between the two. To illustrate this, the chapter ends with a case study

of *République* (Camoflaj, 2013), in which I flip Casey O'Donnell's notion of the 'breaking in narrative', that is predicated upon the creation of an indie game as a calling card or proof of ability to an increasingly competitive industry, to develop what I call the 'breaking out narrative', in which veteran developers leave successful AAA studios (either voluntarily or under duress) to develop their own concepts, often employing stories and processes developed in opposition to those of their origin studios. Paolo Ruffino posits the indie scene as an important vector for creating new narratives around and within gaming, but furthermore sees the games that are produced by these studios as part of that discourse too and "involv[ing] statements that situate the Independent developer within the world" (Ruffino, 2018a, p. 57). It is such works from the vibrant indie sector, situated at the peripheries of the dominant industry and often including marginalised identities typically excluded from the industry (Anthropy, 2012), that deliver the largest challenge to gaming's entrenched norms and thus prompts the greatest resistance from more reactionary gamers (Keogh, 2018a, pp. 15–16).

The final chapter focuses on a specific sub group of interviewees – Steve Gaynor, Dan Pinchbeck and Sean Vanaman – working in the newly minted 'walking simulator' genre, which I argue has done more than any other to challenge normative definitions of play and the centrality of the player in the game text. I attempt to explore how this group of independents conceive of their work as a radical break with both established gameplay and narrative practices in both the AAA and indie sphere, as well as part of a broadening and diversifying of the medium. The walking simulator has been at the heart of a struggle over changing definitions and material realities of videogame consumption and production. As a subset of an already peripheral indie practice (Lipkin, 2013), the genre has been linked to the emergence of disruptive new player and creator identities (Kagen, 2017), including female and queer voices (Juul, 2012; Anthropy, 2012; Shaw, 2015; Chess, 2017). Drawing on case studies of, and interviews with creators of, *Gone Home* (2013) and *Firewatch* (2016), this chapter

attempts to unpick the contested nature of the Walking Simulator within this complex network of cultural struggle, showing how the genre reassembles the dominant nature of play.

CONCLUSION

This introduction has argued that the rigid definitions of the ludologist position, uncritically imported from the industry's own notion of its core audience as Fron et al. argue in their hegemony of play model, and the extension of agonistic notions of play from Caillois, helps to maintain a normative understanding of what games are and who they are for as male-centric endeavours built around competitive struggle. In short, rather than critique and problematise the entrenched ideology of the player, the field of game studies has adopted it whole cloth and used it to construct a number of theoretical notions that empower the hegemonic gamer identity and place it at the centre of the text. For instance, Keogh sees this as a failure of formalist taxonomies to account for truly new work, like that expressed within the indie scene (2018a, p. 11). Further I have shown, through historicising its discourses, that running alongside the ludology/narratology debate is a series of more-or-less self-conscious erasures, denials, claims of innocence and accusations of reductivism that are in line with notions of group formation in discourse analysis and Latour's notion of how the retracing of group boundaries can be thought of in political terms.

Whilst many would love to see it well and truly shelved, some for good reason, I have argued here that the deeper ideological connotations (intentional or not) of the ludology/narratology debate must be unpacked and understood before they can be fully moved beyond. To a certain extent this bias is a question of priorities, as the early decades of the field were taken up by an urgency to define the formal characteristics of the medium rather than critically assess its mode of production or its fandom, in order to progress its relevance as an object of study in university departments. However, the fact that this debate, implicitly or explicitly, continues to re-emerge in a variety of

scenarios demonstrates a continuing problematic tendency to pull games towards an ahistorical, apolitical formalist position. For instance, in Bogost's occasional provocative pieces for *The Atlantic* (Bogost, 2017, 2015a), we can see the warning bells of a similar reductive attempt to police the boundaries of what games are or could be by resurrecting elements of the ludological position in all but name.

In 2013, motivated by its perennial re-emergence despite a belief that the field has (or should have) "moved on", Janet Murray created a post on her academic blog resurfacing a preface to a keynote talk given in 2005 at DiGRA in Vancouver, which claims to be the last word on Ludology vs Narratology (Murray, 2013). In a phenomenally articulate salvo Murray crystalises some of the claims I have been making here. Firstly, she characterises ludology as a reductive approach based on an essentialist belief in the isolationist purity of the medium and an attendant formalist methodology "divorced from cultural history" (Murray, 2013). Secondly, that there is a deeply ingrained set of ideological assumptions constructed around the naturalisation of the male gamer as dominant. In short, early game studies took as normal and in turn perpetuated the hegemonic player model that was in fact historically contingent and partially formed through the industry's own changes in marketing and design practices that led to a new discourse of gaming as an exclusively masculine pursuit (Kocurek, 2015). As a result of this skewed data-set "generalizations are often made that pertain primarily or exclusively to male players" (Fron et al., 2007, p. 2), a process we will see at play in the analysis of *Tomb Raider* and the controversy surrounding the crossroads trailer explored in chapter 2.

Fron et al. issued their warning about the industry (and, by extension, academia) pandering to the hardcore 'gamer' archetype long before Gamergate demonstrated the dangers of leaving this hypermasculine online identity (Ging, 2017; Massanari, 2017) unchecked. According to Fron et al's. critique games academics need to be more critical and reflexive about their practices because their

discourses have been shaped by the hegemony of play in much the same way as the participatory

game audiences it privileges. As a consequence of this lack of introspection, game studies has,

implicitly even if often unintentionally, perpetuated dominant player models (typically white, male,

young) and their preferred forms (genres like first-person shooters) as silent objects; a process

culminating in the unquestioned black-box labelled 'gamer,' that for years has quietly and

ambiguously worked to make what some have termed a niche 'subcultural' group (Dymek, 2012)

appear as the exclusive consumer of videogames. Because the mythological construct of the

dominant hardcore gamer threatens to constrain the audience for games by alienating female

players, an argument made by many scholars (Chess, 2017; Dymek, 2012; Fron et al., 2007), it can be

connected to the kind of obscuring processes of industry secrecy, which anthropologists like Casey

O'Donnell (2014) note is a deep seated problem in the industry that ultimately stymies it's economic

growth. In my critical overview of the ludology/narratology debate, I have shown how the roles

played by ludologists and narratologists within the context of academia also serve something of a

normative function, attempting through their discourse to modulate the medium into a firm set of

values that steer game production along specific lines. But these norms, whether in the industry or

in the academy, can be deconstructed as much as the normative model of the controller has by

Keogh and others.[25]

Indeed, this is a historic juncture for such changes, because as suggested by writers like Paolo

Ruffini, Shira Chess and Brendan Keogh the formalised industry and its entrenched norms are

undergoing a crisis as new audiences, new modes of production and new routes to market

destabilise once settled processes. Such a reorganisation of processes are reflective of the notion of

crisis in Berlant's work, since they demonstrate attempts for the present state of the system to

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[25] Indeed a flurry of recent work recontextualising the controller from a variety of perspectives – queer studies, gender studies, Marxism, Phenomenology, and semiotics amongst others (Anable, 2018; Blomberg, 2018; Marcotte, 2018; Sicart, 2017; Woodcock, 2019) – indicates a new wave of scholarship questioning such taken-for-granted structures in game studies.

reorient itself towards emerging future threats to its status quo. It also justifies my use of an actor-network theory framework to my analysis since this particular approach to sociology stresses that when things are working smoothly they leave no easily discernible sociological traces, but it only when networks are in a state of formation or reformation that their fundamental assumptions and values are most clearly visible. Thus, the huge shifts in the games industry towards new markets and demographics (and the resistance to these by traditional audiences) break the coherent façade of the industry expressed by its use of statistics and normative models of play, exposing its inner workings, and therefore opening up a window for analysis. As Bruno Latour argues, such moments in anthropological terms allow us a privileged view of the disintegration and reassemblage of a tribe; a moment that Latour suggests are when the social traces that make it up become most readily apparent to interpretation (Latour, 2005, pp. 80–81).

Bogost believes that both ludology and narratology have contributed to a stultifying formalism, the former through having "privileged the material over the expressive" (Ibid., p. 53) and the latter through their failure to deal with poststructuralist theories and to address medium specificity, and whilst I have focused on deconstructing the ludology position here I acknowledge too that overly focusing on narratology also restricts the field's focus far too much on the internal logic of the media texts, locking it off from larger circuits of meaning in which it circulates. Games studies has begun to leave the ludology/narratology debate behind, challenging what I have referred to as the orthodoxy of game studies with a variety of new approaches and theories: these include ethnographic reassessments of gaming audiences (Chess, 2017; Thornham, 2011), critical anthropological analysis of industry practices (O`Donnell, 2014), and autonomist Marxist critiques of the globalised regimes of the games industry contexts (Dyer-Witheford and de Peuter, 2009; Kline et al., 2003). Meanwhile specific theoretical approaches by a new generation of game studies scholars, which have been a huge influence on me and this thesis, include: Laine Nooney (2013), who challenges patrilinear teleology of the industry through the introduction of the concept of speleology (spelunking in

history) and a historical reassessment of marginal female figures like Roberta Williams in official industrial narratives; Brendan Keogh (2018a), who challenges discourses of proficiency and skill through an introduction of phenomenology; Paolo Ruffino (2018a), who uses the notion of creative media studies and Michel Serres' (2007) notion of the parasite to challenge discursive structures of the industry as stable networks; and Aubrey Anable (2018) who uses theories of affect to problematise traditional game scholarship's emphasis on proceduralism. As a result, it is these scholars, and others from outside the field entirely (Raymond Williams, M.M. Bakhtin, Bruno Latour, Edward Soja, Michel Foucault and Michael Callon), rather than the traditional luminaries of first wave game studies bound up in the problematic schism between game and story, that will form the theoretical basis of my discussion going forward. This refocusing of scholarly canon is perhaps the surest way I can think of to bypass the formalist quagmire of the ludology/narratology debate and to extend game studies into the wider field of cultural studies, not to mention the other academic disciplines ludology sought to separate it from. I thus take up Brendan Keogh's (2018b) call to find a new language for game studies that breaks with the formalist assumptions and rigid definitions of its first wave orthodoxies.[26]

By extricating ourselves intellectually from the polemic and highly binary situation of seeing gameplay and narrative – core and shell – as intrinsically opposed we can move on to more interesting fields of enquiry. Instead of defensively arguing whether games are principally a storytelling media or a ludic one, we can ask what stories they actually tell (and what systems they use to tell them) and why? We can see that specific works, or groups of works, exist within the larger dynamic context to craft their own meanings, which feed back into the general landscape of the industry in often complex ways. In short, we move from the grandly ontological ambition of first

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[26] Keogh himself attempts this through a return to an overlooked and highly phenomenological text from the early days of the medium that forms the account of Jazz musician Davis Sudnow (1984) to understand videogames as a kind of "instantaneously punctuated picture-music", but my attempt to explore texts from outside the core field is another tactic in this larger strategy.

wave, orthodox game studies, where the definition of the medium as a whole is at stake, to a set of more situated, localised and contingent epistemological issues of exactly which meanings are at play (and how) within it.

Henry Jenkins (2004c) once compared videogames to a duck-billed platypus, a species that confounded naturalists: "some of them denied that such a creature could exist and denounced early reports as fraud, while others sought to erase all ambiguities about its status, trivializing any problems in classifying this species." Such is the tendency of heavily reductive definitional models like the classic game model to account for deviation and difference; marking it *a priori* as an aberration rather than evidence that the industry is moving in fresh directions and isn't as static as some accounts suggest. Using this colourful metaphor, Jenkins suggests that the fascinating thing about videogames is their multimodal complexity; an intrinsic heterogeneity that flies in the face of any attempt to totalise or universalise. At best continuing such reductive lines of thought embedded in the formalist critical orthodoxy doom the discipline to irrelevance (a niche bickering over tiny unimportant issues of form at the periphery of the academy, unlikely to have any resonance or impact within the wider cultural sphere), and at its worst could fan the flames of increasingly polemical debates in the real world as Murray fears (by providing rigid definitions that can be weaponised by core gamers forming their in-group against a perceived threat from the outside). One way of understanding Gamergate, for instance, is as an extreme example of the kind of highly politicised group formation explored by Latour, where a privileged group of core gamers attempt to fend off sudden change by presenting themselves as victims of a feminist conspiracy to undermine the medium they have historically been placed at the heart of. The presence of such a group, and the destructive influence they had on many careers in both the games industry and those in the academic context who had the courage to speak out against it (Chess and Shaw, 2015; Quinn, 2017), demonstrates the high stakes of the massive reconfiguration of gaming audiences and product forms that this thesis explores.

This thesis, thus, sits at the intersection of many different transitions that both the games industry

and games academia are undergoing and seeks to make an intervention into crucial debates that cut

to the very heart of what a game represents, who gets to play them, and, crucially, who gets to make

them. A recognition of these heterogenous practices, which will be explored in the coming chapters,

I hope will provide the real final word on the ludology/narratology debate, which in its traditional

form as binary, mutually exclusive functions can be seen to be utterly incommensurable with the

complex, often messy practices of game development, which often seek to blur the two. Discussing

the core principle of actor-network theory Bruno Latour insists that we "follow the actors" (2005, p.

179) themselves as they work to construct their realities and so the biggest rebuttal we can offer to

the notion of gameplay and story as irreconcilable is the fact that, as Geoff King and Tanya

Krzywinska assert, "[Narrative] matters to many game designers, an important point given the

tendency of some commentators to treat narrative as essentially a concern brought to games from

outside" (2006, p. 46). Rhianna Pratchett, one of my interviewees, is testament to this and has

responded, for instance, to id founder John Carmack's infamous comment that games needed a

story as much as a porno with her own empirical observations: "Over the time I've been in the

industry I've seen so much happen in terms of narrative. It's been focused on by developers, by the

press, by gamers themselves" (Takahashi, 2016). Even after dismissing the work of narratologists like

Janet Murray, Punday admits that there has been "a long-standing theoretical interest in narrative

among practitioners in digital media that makes the role of theoretical reconsideration particularly

central to creating stories in this medium" (Punday, 2019, p. 24). In short, the empirical reality is that

thinking about narrative is at the heart of games industry approaches to industrial theorising. Not

only does narrative matter to game designers, and certainly all those I interviewed or researched,

but there is much evidence that designers are constantly working to theorise new ways to practically

reconcile the two in a process I have above tentatively called ludonarrative convergence. Having

historicised the ludology/narratology debate, including exposing its deeper ideological assumptions, it is time to recognise that, whilst it was once useful as a discursive engine for the growth of game studies, such an artificial distinction between game and story has since become an unproductive impasse in the field and is increasingly difficult to maintain or justify in light of the realities of industry practice. Putting the debate aside, then, I take an approach more in line with industrial theorising on the topic; one that recognises that both the ludic and narrative qualities of games are meaningful and can be meaningfully combined.

Chapter 1: Reassembling a Production Studies Methodology in a Games Industry Context

As might be expected for a field that developed within the bounds of such a polemic debate as that explored in the previous chapter, the issue of methodology in game studies is inevitably a fraught one. Under the auspices of ludology the field sought to break with traditional humanities disciplines and set out to find its own way (Anable, 2018), which included its own intrinsically formalist and structuralist methodologies, meanwhile the narratology perspective was sometimes guilty of ignoring the specificity of games as a media, often importing methodologies from other fields with little adaptation. These two mechanisms have resulted in the displacement of method as a serious object of concern until very recently; allowing Frans Mäyrä to make the relatively uncontroversial statement that, "the methodological landscape of games research in some cases may appear as an undisturbed and untrodden terrain, devoid of any paths" (Mäyrä, 2015: xi). Compounding this issue is the problem of games as a complex, multimodal and ever-shifting object of study which, as Astrid Ensslin and Isabel Balteiro notes, requires a certain methodological flexibility as well as "constant scholarly innovation." The collection of essays they have assembled typifies a breadth of "methodological combinations and triangulations" from a "diverse, multi- and interdisciplinary analytical approaches in use across humanities and social sciences" (Ensslin and Balteiro, 2019, p. 9), but crucially their work is centred by an approach to discourse analysis, which I discuss below as a useful means of stabilising my enquiry.

Whilst Lankoski and Björk's edited volume on game studies methods,[27] in which Mäyrä's claim appears, was intended to provide some waypoints in this wilderness, I find myself commitment to a course – production studies – curiously left out of a book designed to address the field's lack of methods. A year after the book's publication this lacuna was ready to be addressed at the 2016

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[27] The only such book specifically on methodology that exists in game studies to my knowledge.

instalment of the Digital Games Research Association (DiGRA) conference at Abertey University in

Dundee,[28] where a panel was held entitled: 'Why Production Studies? Why Now?' (Banks et al.,

2016). The panel addressed the urgency to meet the rapidly expanding global games industry, with

the same level of critical scrutiny long afforded other domains of the cultural industries (Banks,

2007; Hesmondhalgh, 2013). In particular they made a case for the recent acceleration in games

industry growth[29] urging that, "such studies are particularly relevant at a moment when the game

industry is becoming increasingly complex in its actors, (power) relationships, and labour practices"

(Banks et al., 2016).

Sitting on that panel was Casey O'Donnell, who remains one of the handful of academics that has

conducted extensive anthropologically informed research into the production cultures of the games

industry, and whose book *Developer's Dilemma* (2014) provides a crucial touchstone to my own

study. For O'Donnell, as for me, the games industry is far messier and more diffuse than the tidy

auteur-driven narratives of studio production that circulate around previews in the myriad sites of

games journalism or are routinely summarised in a succinct paragraph in the footnotes of industry

press releases.[30] For O'Donnell this variability is embodied in the multistage, multidisciplinary nature

of the production process itself, which he defines as, "a creative collaborative process involving

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[28] Often lacking a departmental home in all but the most specialised universities, DiGRA is the institutional entity that the interdisciplinary field of game studies has typically orbited around since its founding in 2001, today attracting in excess of 400 scholars from around the world. A significant site, then, to make such a claim.
[29] The size and complexity of teams working on key titles in the *Assassin's Creed* franchise at Ubisoft, one of the major publishers, is a key indicator of this growth. The team for *Assassin's Creed II* in 2009 reportedly tripled the team for the original game released in 2006 (Anon, 2009), the success of which was largely responsible for elevating Ubisoft to the status of AAA developer. A few years later and the work force had reached over 1000 (Makuch, 2013), composed of multiple teams (Makuch, 2014), located at sites around the world (Totilo, 2018), which makes Ubisoft one of the most successfully globalised of the industry's major players.
[30] The following spiel from a press release announcing *Ni No Kuni* (2010), produced by the in-house PR team at publisher BANDAI NAMCO, is illustrative, presenting developer LEVEL-5 as a coherent and stable entity: "LEVEL-5 Inc. plans, creates, and markets videogame software in Japan. The company's flagship Professor Layton series has shipped over 12 million units worldwide, while the mega-hit INAZUMA ELEVEN series has shipped over 3.65 million units worldwide… While maintaining its base as a game company, LEVEL-5 Inc. continues to actively explore collaborations with other media, as it strives to become a world-class entertainment brand." (BANDAI NAMCO, 2011)

numerous disciplines rooted in a particular culture producing creative, artistic and culturally important works" (O'Donnell, 2012a, p. 18). Much of this chapter is dedicated, through an analysis of my interview data, in sketching out some of the ways this collaborative process unfolds, and how my methodology is suited to this process.

The situation described conforms to the 'messiness' that John Law famously sees in the complex object of most social sciences research (2004) that belies attempts at applying clean and unyielding top-down theoretical approaches. Just as games are messy, hybrid, multimodal objects of study I follow John Law's assertion that such an object of study requires a messy method to account for it and that "ethnography lets us see the relative messiness of practice" (2004, p. 18). In short, Law calls for a method that is able to attend to the contingency and uncertainty of its object; a method that can be found in actor-network theory (often abbreviated to ANT in an affectionate nod to the industrious network building insect that could be considered the theory's spirit animal).[31] With its constant claim to "follow the actors" (Latour, 2005, p. 227), ANT provides the ideal framework for approaching the complexity of the videogame industry since I am interested in how developers undertake to construct the networks that define the social conditions of game production, what Caldwell would call its 'production culture'. Throughout this thesis I leverage the framework of ANT to trace the complex networks that exist both within and beyond the black-box of the game studio and their products, extending throughout the game and linking with the broader context of industry structures and culture at large in which the studio is entangled (O'Donnell, 2014; T. L. Taylor, 2009a). Although the game studio, and its creative leads, remain an important entry point for this analysis, they are considered alongside a variety of non-human actants (processes, tools, hardware,

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[31] Although there have been recent orchestrations in game studies towards uses of Actor-Network Theory (Chess, 2017; Muriel and Crawford, 2018; O`Donnell, 2014), or even a related Deleuzian assemblage theory (Joseph, 2013; Steinkuehler, 2006; T. L. Taylor, 2009a), there have been few sustained attempts to relate such theories to the domain of production. In addition, there is a great tendency to draw on elements of ANT piecemeal often without making a strong case for the relevance of the entire theory to a game studies context.

organisational structures) that ultimately form any social reality. As a consequence the social and technical processes – what Latour calls the 'technogram' and 'sociogram' (1988, p. 138) that together make up a laboratory (or a game studio) as a 'technosocial' assemblage – that support and constrain game production are also considered at length. As a consequence of these considerations, I attempt to frame the game studio as a unit of analysis within the complex flows of narrative intention and economic realities, drawing on recent work in studio studies (Farías and Wilkie, 2015), which brings production studies explicitly into an Actor-Network framework.

This chapter also demonstrates that the output of the games industry cannot be reduced to the mere piece of software that is its tidy finished product (on which formalist approaches are focused), nor can the site of its production be imagined as an unchanging, ahistorical entity (the studio named X). Studios are messy, provisional arrangements of a number of individual trajectories, subtly and sometimes profoundly different at each point in their existence. Meanwhile, not only are the games produced by such assemblages rarely ever finished, since they increasingly exist in a long-tail service model updated over time, but a studio always produces much more than just a game (O'Donnell, 2012a, p. 18): it produces ancillary software and processes (engines like Epic's *Unreal Engine 4*[32] and other more focused tools) that are often licenced out; and, less tangibly, can kickstart individual careers or create trends that have a seismic effect on industry patterns. More subtly, studios create a model of the player to whom they address the game, as argued in the introduction. By using semi-structured interviews to frame the testimonies of creatives within such an assemblage in the ways outlined below, I argue we can gain a valuable insight into how developers not only comprehend and negotiate these structures, but how they actively construct them via their activities and discourses.

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[32] At the time of writing *Unreal Engine 5* is in the process of being released and constitutes a considerable technological leap in terms of real time rendering and dynamic lighting techniques, but even more crucially has been heavily marketed at the film industry, providing tools for filming against fully manipulable virtual backdrops (see *The Mandalorian* (Favreau, 2019) which used and heavily promoted this technology in partnership with Epic). It thus demonstrates the biggest play yet for the games industry to expand their proprietary technologies into all areas of the cultural industries.

Indeed, one of the more ambitious arguments of the thesis is to propose that not only is it problematic to consider texts apart from their production contexts, but that the structural conditions of the industry are often replicated and explored in the texts themselves. In many examples of the AAA sector this results in an attempt to replicate and justify its own centrality within the fictional space of the game, for instance in its tendency to produce huge open world environments that speak to a high degree of specialisation and scale of professional labour in huge teams as well as the focus on highly empowered protagonists who exist at the centre of the game's narrative and exert a high degree of agency on it; tendencies that not only reinforce the hegemony of play explored in the introduction but also further enforce the neoliberal myth of meritocracy (Littler, 2017; Paul, 2018) and personal development that chapter 2 will argue exists within the games industry production context.

This thesis attempts to undertake the vital work of bridging the gap between a textual analysis of the game as cultural object within a cultural studies framework, and approaching the material reality of the industry via a production studies approach, thus eschewing the field's tendency to focus entirely on either production or the formalities of the text, and instead demonstrating the ways that these two domains are intricately bound up with each other in larger, intersecting networks of influence and interdependence. Methodologically it sees the text and the context as not mutually exclusive objects of study but deeply integrated, seeking to extend production studies *into the text* and formal analysis of the text *into the industry*. The key intervention, then, is a fusing of production studies, which has been highlighted as an urgently required analytical frame for game studies (Apperley and Jayemanne, 2012; Banks et al., 2016; O`Donnell, 2014) alongside and inseparable from the texts that are produced.

PART 1: TOWARDS A NEW METHODOLOGY FOR GROUNDED RESEARCH IN THE GAMES INDUSTRY

O'Donnell has found that the game industry is deeply structured around secrecy, embodied in processes like non-disclosure agreements, a lack of transparency over sales data, and a general obscuring of the conditions of labour that ultimately give the industry a romantic glamour (explored in chapter two). I propose that the historical disinterest in issues of production in game studies has reinforced this culture of secrecy and accommodated the obscure operation of the games industry functioning as a 'black art' (O`Donnell, 2014, p. 75). In ANT terms, the industry appears as an inscrutable 'black-box',[33] a sealed off set of processes that serves to obscure the actual arrangements that produce them. Latour discusses the process by which things – whether physical apparatus, scientific concepts, political issues, social groups or industry processes – pass into such obscurity:

> Once the candidacy of the new entities has been recognized, accepted, legitimized, admitted among the older propositions, these entities become states of nature, self-evidences, black-boxes, habits, paradigms… [which] serve as indisputable premises to countless reasonings and arguments that are prolonged elsewhere. (Latour, 2004, p. 104)

The crucial point is that such black-boxes replace, obscure, automate and naturalise the original relations, processes and debates that formed them.[34] ANT methodology is particularly attuned to accessing and unpacking such black-boxes, "to make them talk, that is to offer descriptions of themselves, to produce scripts of what they're making others - humans or non-humans - do" (Latour,

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[33] A brilliantly effective term since it captures both the technological vector by which the fragmentary media landscape is converging into a singular access point (Jenkins, 2008), a process in which modern consoles with their smart apps and connectivity massively contribute to, but also the iconic black-box recorders of aeroplane disaster investigations. In a deconstructive gesture it thus provides both the description of the object of analysis and the instrument by which it might be opened up and analysed.

[34] There is a parallel here to Roland Barthes notion of 'myth,' based on his famous exploration of how myriad cultural forms embed, perpetuate, and naturalise ideologies in order to, "account in detail for the mystification which transforms petit-bourgeois culture into a universal nature" (Barthes, 2009a, p. 9).

2005, p. 79). In practical terms this is largely a process of looking for moments of rupture in which the otherwise silent object becomes disputed, and is transformed again into a thing[35] that mediates: for instance when it is being constructed (in the laboratory, or in our case the game development studio), or when it breaks (for instance, when there is a controversy around an event).

In a very real sense the final product of game production, the game potentially millions of people will play or become aware of in the increasing proliferation of game marketing (as well as the general growth of awareness of gaming culture in wider society), is a reification of all the creative and management decisions, processes and other conditions of production that lead up to it. Just as much as the console it is played upon and the secretive industry formations that create it, the game can be thought of as a black box sent into the world, built from an unfathomable code base only accessible by the most dedicated hackers. The processes with which it was constructed have become invisible making it a 'mute object' that leaves no sociological trace; the material factors of its existence, once so important, only lingering as implications barely discernible via the ephemeral inscriptions the game leaves upon our screens or in the potentially unreliable anecdotes told by developers in GDC talks or interviews in the specialist press. This leaves us the significant problem of how to access these inner workings once the messy process of game development has crystallised into a tidy black box.

One prominent movement in media studies designed to prise open the silent edifice of media producers so often neglected by academia is that of production studies. John Caldwell's influential *Production Culture: Industrial Reflexivity and Critical Practice in Film and Television* (Caldwell, 2008b) is a core text here, bringing anthropological concepts and methods to bear in a major way upon the

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[35] The distinction between an object and a thing in Latour's theory is nuanced but may be summarised for our purposes as distinguishing between a black-box that obscures its relations (an object) from something that is placed back into a dynamic network of interrelated effects (a thing). An object is silent and static, but a thing is dynamic and transformative (which is captured by the ANT term 'mediation').

secretive world of Hollywood, just as Latour did with technoscience in his fieldwork at the Salk

Institute in his pioneering *Laboratory Life* (Latour and Woolgar, 1986). Whilst Caldwell is not

considered a core ANT theorist, his work can be appreciated in the context of this influential

movement, which he sparingly draws upon in sometimes explicit terms. For instance, Caldwell's

approach to tools and processes proves to be deeply informed by Latour:

> Bruno Latour's ''actor-network theory'' underscores both the agency of machines and the
>
> ways that our social delegation of competencies to these manufactured ''lieutenants'' (or
>
> ''retinue of delegated characters'') continually returns to prescribe our present social
>
> relations… The ways that tools ''think'' are historical even as their design and operator-
>
> interfaces function according to sociological conventions. (Caldwell, 2008b, p. 152)

Caldwell's mapping of Latour's notion of 'delegation', in which an apparatus is made to stand in for a

more complex set of sociotechnical operations whilst being simultaneously imbued with the

processes and ideas that brought it into being,[36] makes it clear how these ideas are relevant to the

study of complex industrial processes in the media industries.

What Bruno Latour, the doyen of ANT, means by his famous slogan "follow the actors" is that

instead of basing research on assumptions, one should dutifully follow the sociological traces left by

both human and non-human actors, as they move things through a relational network of links. Such

actors that have an effect on the things they move are 'mediators,' whilst those that merely pass on

a signal without changing it are 'intermediaries,' and the way a thing is changed through its

movement in a network is a 'translation.' Here is one of the more succinct and elegant summaries

Latour has given of the point:

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[36] This concept is explored in one of Bruno Latour's most playful essays 'Where are the missing masses? The sociology of a few mundane artefacts' (Latour, 1992), in which he discusses the effect of a door spring (itself a delegation of the work of a doorman) has on a conference of academics.

A good ANT account is a narrative or a description or a proposition where all the actors do

something and don't just sit there. Instead of simply transporting effects without

transforming them, each of the points in the text may become a bifurcation, an event, or the

origin of a new translation. As soon as actors are treated not as intermediaries but as

mediators, they render the movement of the social visible to the reader. (Latour, 2005, p.

128)

The effort here is to bring a production cultures approach into game studies (O`Donnell, 2014;

Weststar, 2015) in order to identify such events, bifurcations and translations. Such attempts have

been framed within what Thomas H. Apperley and Darshana Jayemanne call a 'material turn' (2012)

in game studies. They see this as part of a wider movement in game studies away from formalist

concerns, which I argued in the previous chapter dominated the origins of the field and still persist

today, toward a series of approaches that circulate around the material realities of games

production, reception and platform. The authors define this materiality rather broadly as "a certain

'stubbornness' of material reality that introduces an aleatory or contingent element into what might

normally be thought of as formalized and calcified structures" (Apperley and Jayemanne, 2012, p. 7).

This view sits well with ANT's understanding of apparatus as a closed (calcified) object into which

other actors and processes are standardised and delegated; the very structures that the material

turn seeks to reopen via a king of reverse engineering. It also fits incredibly well with ANT's rather

pragmatic notion of reality as something that exists not simply *out there* waiting to be grasped as in

scientific positivist notions of the real, nor something just *in here* and formed by our senses and

cognitive processes as in extreme idealist accounts; but as something that continues to exists after

all trials of strength are exhausted (Latour, 1988, p. 93). One of Latour's classic examples of this is

the 'anaerobic microbe' named so because of its proven ability to survive in the absence of air,

which is the trial of strength after which it is named. The real is what is left over after all attempts to split it. Materiality, then, should not be confused for the search for an objective truth or a fated origin from which history moves in an orderly, teleological fashion, but becomes more like a residue left by a variety of processes. This makes it similar in character to Foucault's 'genealogical' approach to history (1991a) described above, which strives to "cultivate the details and accidents that accompany every beginning," and understands history as, "the concrete body of a development, with its moments of intensity, its lapses, its extended periods of feverish agitation, its fainting spells". In short, these are all approaches that share an interest in the emergent, iterative and contingent properties of the object of study (the mess of game production), and not solely its objective reality (the black box of the game or the traditional model of the gamer), which is ultimately the outcome of those processes.[37]

One key strand of game studies that exemplifies this material turn is that of 'platform studies' developed by Ian Bogost and Nick Montfort in their ongoing series for MIT press. This is a critical concept that overlaps with my method and links the games industry to broader economic and political concerns, particularly what some theorists have referred to as 'platform capitalism' (Srnicek, 2016), where modern economic realities are seen to be built upon and constrained by the algorithmic systems and application programming interfaces (APIs) of the dominant Silicon Valley tech giants like Google and Amazon. As Apperley and Jayemanne summarise the success of the platform studies approach is its flexibility and practical application as a framework:

> The materiality of platforms can be turned inwards to examine the individual components of a platform, and just as easily outwards to focus on the organizational structure that allows

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[37] Such an approach is being undertaken by a new generation of game scholars such as Laine Nooney (2017, 2013), whose work on the formation of Sierra Online (analysed in chapter 5) challenges the tidy, celebratory historical accounts of the game industry (more-often than not penned by journalists), that remain certain of its inevitable linear development into the dominant entertainment medium of our age (Donovan, 2010; Poole, 2004).

the platform to be produced. The genius of platform studies is to locate the platform as the

stable object within this complex, unfolding entanglement, allowing it to perform the role of

a centre around which other relationships may be traced and examined. (Apperley and

Jayemanne, 2012, p. 12)

Early works of this school of thought focused almost entirely on the technological platform of the

game console and its architecture (the unique arrangement of patented chip-sets, wiring and

electronic components that constitute a computer system), such as Bogost and Montfort's own book

on the Atari VCS, *Racing the Beam* (2009), which laid down a template for the series and contains

the authors claims that the method, "promote[s] the investigation of underlying computing systems

and… how they enable, constrain, shape, and support the creative work that is done on them"

(Montfort and Bogost, 2009, p. vii). Increasingly the perspective of the platform studies approach

has broadened and come to include the corporate infrastructure of the manufacturer itself including

its publicity and R&D departments, as evidenced by a more recent book in the series by Sebastian

Arsenault, where he challenges the limited, technological determinist view of a platform:

Platforms are not technology constructs that exist by themselves, with cultural or marketing

considerations gravitating somewhere around them; a platform is a technology and a culture

and a marketing construct, and these elements are indissociable. (Arsenault, 2017, p. 5)

Fundamentally, the evolving notion of the platform now cleaves closer to both Caldwell's notion of

production cultures and Latour's assertion that such 'technosocial assemblages' arise from a

complex entanglement of human and non-human actors (tools, engines, processes, documents).

Whilst platforms provide productive limits to what can be produced in/on them, they by no means

absolutely determine its content, rather the platforms themselves are formed also from social

activities (boardroom meetings, R&D departments, publicity feedback mechanisms, market demands, resource availability); they are one actor on the network amongst others.

Rather, I am interested in another aspect of the material turn in particular identified by Apperley and Jayemanne, which might be called the anthropological turn, as it describes the application of ethnographic methods onto audiences (Pearce et al., 2011; T. L. Taylor, 2009b; Thornham, 2011), an approach that I wish to follow O'Donnell in applying to production cultures themselves. I want to stress that the anthropological turn towards the neglected production context does not constitute a simplistic or uncritical return to the author as a source of truth, which Caldwell highlights is a perennial concern of political economists or proponents of textual analysis in films studies who dismiss such approaches as the "naïve forms of ethnographic deference, positivism and 'empiricism' that drive sociological research" (2009, p. 171). In treating human actors alongside technological entities, ANT understands them to be one of many more-or-less expressive nodes in a network, where the emphasis is rather on the links between them; how they interact to move concepts, resources and other immaterial goods around. This thesis takes a similar approach to issues of celebrity and authorship when approaching game designers who, in many cases and particularly in the indie sector where issues of authorship and authenticity are more fraught, have developed an air of the auteur (the idea of the artistic genius that emerged in and dominated the field of film theory for much of the latter twentieth century (Sarris, 2009)). In the ANT account individual actors can be important, even vital nodes in a network, but they can never *replace* the rich complexity and contingency of the network wholesale, nor can their agency completely subsume the energies of all the other actors clamouring for attention. Hideo Kojima may be the auteur widely celebrated by videogame fandom, but without a huge team of collaborators, the patented Fox Engine and the cultural penetration of the PlayStation into millions of homes around the world, it is unlikely that *Metal Gear Solid* (Kojima Productions, 1998) would have existed in the form it emerged.

This is why in his provocative book *The Pasteurisation of France*, (1993a), Latour makes a sharp distinction between the real historical figure of Louis Pasteur and the cultural understanding of him as 'Louis Pasteur', the discoverer of microbes. Here Latour turns the full framework of his methodology to bear on one of the indisputable heroes of French science, who is credited with the cure of smallpox and as being the founder of microbiology. Rather than claiming such an exalted identity for monsieur Pasteur, Latour brilliantly analyses him alongside Tolstoy's questioning account of Napoleon's heroic status in *War and Peace*. Where Tolstoy, challenging the 'great man' view of history, reveals Napoleon's triumphs to be down to a complex network of factors – good generals acting under their own initiative, quirks of nature, historical contingency itself – Latour's view of Pasteur similarly sees him as drawing on a considerable social shift already underway in France: the hygienist movement. This was fed by nationalist discourses of the state looking for a solution to its ailing urban populations that were proving inadequate to run the growing factories of industrialism, administer the colonies, or to enlist into the vast armies required for a retaliatory war against Prussia. The discovery of the microbe, which was already understood vaguely by the destructive traces it left in human bodies (leading to a variety of speculative theories of what it was – one leading theory was bad air or miasma – or how best to deal with it), had become a pressing socio-political concern and Pasteur was able to skilfully manipulate those forces and position himself and his laboratory at the centre of the networked flows. Pasteur's laboratory became the crucial node through which all stakeholders (the hygienists, the farmers, government funding, and the microbes themselves) flowed. It was here, in what ANT theorists (borrowing from the discourses of military strategy that might be more familiar to Napoleon) call "the obligatory passage point" (Latour, 1993a, p. 44), that the microbe was stabilised and bought into being for all to see. Perhaps the terms 'ludologists' and 'narratologists' explored in the introduction similarly need to be squared away in inverted commas, not so much because that they are anxiety inducing boogiemen (though they will be to many), but that they never truly existed in those simple terms, except as discursive constructs leveraged against one another and vaguely overlapping with real people and practices.

Although there are a number of approaches outlines by Apperley and Jaymane in the material turn, including the growing domain of platform studies, I personally find ANT a particularly compelling account of highly networked social formations in a post-Fordist, postmodern era, and one with the depth and flexibility to cover the complexity of my object. I also recognise that its particular tone of voice is immanently fitting to the highly technosocial domain of game development itself – one characteristic of both ANT and the games industry being an extremely technical rationale, as can readily be seen by perusing the titles of talks in any given year of the game developer's conference.

APPROACHING INDUSTRY THEORISING THROUGH A QUALITATIVE FRAMEWORK

The previous chapter introduced a core concept to this thesis in the form of John Caldwell's notion of 'industry theorising', which is about tracing and bringing to light the reflexive discourses of producers and practitioners within the film industry as, "a kind of indigenous cultural theory that operates outside of academia" (Caldwell, 2008a, p. 5). For Caldwell these practices are instilled in rituals and narrative structures which form 'deep texts' that circulate within production cultures, which is the subject of the next chapter. Caldwell develops his notion of 'industrial theorizing' to explore, and take seriously, the practices conducted within the industry for various purposes (training, marketing, planning, recruiting) that mirror, or sometimes explicitly draw upon, the kind of critical activities that academics themselves undertake, "namely, close critical analysis, aesthetic speculation, screen technology assessment, reception study, historical debate, and general formal and cultural theorization" (Caldwell, 2009, p. 168). My research is motivated by a desire to take seriously and to expose instances of such industry theorising within the games industry, which have often been neglected by a field sometimes obsessively orientated to the formal properties of the game text or the experience of play. The core research questions that initiated my enquiry and

underpin my approach can be summarised in the following terms (see Appendix F for a rough interview protocol which sought to tease out some of these concerns):

1. What are examples of industry theorising in the games industry and specifically how do developers negotiate the established tensions between gameplay and narrative in specific and situated moments of creation?

2. How do the material structures of the industry both macro (in terms of its overall commercial structure explored in chapter 2) and micro (the individual arrangement of forces in a given studio) afford or constrain creativity?

3. How do these factors tie into larger transitions within the consumption and production cultures surrounding games and how do developers view themselves within these shifts?

A connected concern that emerged, and is explored in detail in chapter 3, is in what ways do these issues differ across the commercial, mainstream site of the industry (AAA development) and the smaller scale independent context of microstudios (indie development)? I hasten to add that although such concerns guided the entire interview process, they started off in a far more nebulous sense and only came into true focus through the process of interviewing. The unifying point to these three questions is a process of understanding the developer's reflective and intellectual stance on their own practices, whether that be at the scale of creation, the community of practice that emerges within a studio, or indeed their link to much larger shifts that their own work is a much smaller contribution to.

Caldwell notes that the level of industry theorizing that occurs throughout the film industry not only, "dwarfs the constrained analyses carefully framed by scholars," but is also encouraged by the

corporations themselves who, "systematically rationalize industrial critical activity as workaday parts of content development, marketing and branding" (Caldwell, 2009, p. 168). Taking into account the centrality (and rapidly growing number) of regional games industry events such as The Game Developers Conference (GDC) in San Francisco, D.I.C.E. held by the Academy of Creative Arts and Sciences in Las Vegas and Develop: Brighton, suggests that such activities of the exchange and assessment of ideas are also a core part of the games industry. As more and more art school graduates, who are also taught contextual studies in the form of cultural and media studies theory, slowly filter into the industry the effect they can have on this marriage of games culture and critical theory can only grow. Indeed, one of my interviewees, Dan Pinchbeck of The Chinese Room, had emerged from a very explicit background in academic research and believed it not only effected his approach to game-making but the manner in which he perceived the industry:

> I think designers are curious, imaginative people… [there's] always an element of research and questioning behind any interesting design process. I think it's not done in an academic way, because fundamentally most of those people are still operating commercially and if you're operating commercially it's very difficult, there are different sets of agendas where even if those things may run parallel and ask the same questions. [DP57]

Some games could thus be seen as sites in which not only academic theorising occurs, as per Caldwell, but a place where theories are disseminated and tested in a concrete environment or speculatively explored through fictional texts (and often both). In this sense, then, the media potentially becomes a site of dissemination of academic ideas into wider culture, where 'aca-practitioners' (to adapt the term 'aca-fan' from fan studies, which denote a scholar who is also a part of the fandom and must negotiate the potential conflict of interests) conduct a form of practice based academic research.

Many of the designers interviewed within this thesis reflected on their practice deeply within the larger context of the industry, and most also understood their work, like Pinchbeck (though not in such explicit terms), as a kind of critical intervention; an effort to appeal to or construct new audiences and also to inject new ideas into the industry. Time and time again we will see in my interview corpus examples of developers actively thinking about the themes and structures of their games in terms of larger socio-cultural concerns, which bears out Caldwell's claims about industry theorising and shows it to be alive and well in the world youngest and largest entertainment industry. Fundamentally this thesis recognises that we now have a growing body of work on industry formation and change (Arsenault, 2017; Chess, 2017; Juul, 2012; Montfort and Bogost, 2009; Newman, 2012; Zackariasson and Wilson, 2012) and my ambition here is to put the subjective voice of the developer back into this equation. I now turn to my methodology in detail and present the qualitative semi-structured interview as the ideal tool to gain access to such a subjective voice.

Carl Auerbach and Louise Silverstein's book on qualitative data collection challenges the tendency to view quantitative methods as superior in the social sciences – and indeed by extension the humanities who seem always to be chasing social sciences' tail.[38] Indeed, this bias towards hard data is potentially even more a concern for a discipline so heavily embedded in technology and data. Data and code are not only the raw components managed within games industry pipelines, but also a key metric by which to promote its activities. For instance, regular high-profile reports undertaken by large scale industry lobby groups like The Entertainment Software Association (ESA) in North America (2018, 2015) or The Association for UK Interactive Entertainment (UKIE) in the UK (2016, 2015), utilise quantitative methods in the form of large scale surveys to trumpet the health and economic performance of the game industry. Less frequently reports on workplace diversity or employability from more independent groups like The Independent Game Developers Association

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[38] No doubt as they attempt to justify their existence and make a case for their economic value in neoliberal university environment (Luka et al., 2015) through aligning themselves more deeply with hard science and its methods.

(IGDA) (Gourdin, 2005; Weststar et al., 2016) or government entities like Creative Skillset (Creative Skillset, 2016), provide a cautionary counterpoint to the celebratory rhetoric. Elsewhere, in the field of television studies, David Morley has highlighted the problem with such statistical methods as "by their very nature, disaggregating—inevitably isolating units of action from the contexts that make them meaningful" (Morley, 1992, p. 165).

Whilst this statement was made in light of the ethnographic challenges of studying television audiences, I believe it holds true in consideration of an understanding of production contexts where such figures obscure as much as they reveal about the conditions of production enacted by developers in "'natural' setting, as a contextualized activity" (IBID). Whilst such quantitative studies are adept at taking a snapshot of the overall state of the industry at a given moment, because of the inflexible nature of their design (participants give a narrowly defined set of response to a rigid array of questions) they are less well suited to exposing the deeper reasons for why such structures exist or for capturing participants subjective experience of them – in short, such surveys have "mistaken rigour for understanding" (Morley, 1992, p. 166). This is where qualitative methods can be essential, for instance, to modify a rather pertinent statement from Morley:

> What is needed is not simply improved techniques of audience [games industry] measurement… but improved methods of audience [games industry] research… so that we can not only measure what different types of audience [designers] do, *but also understand how and why they do as they do*. This centrally involves an understanding of television viewing [game production] as a complex and contextualized domestic [industry] practice. (Morley, 1992, p. 167 my italics)

Further, such studies are not neutral, but are conducted by lobbying bodies motivated by furthering the interests of the industry (mostly key stakeholders like large publishers and platform holders they

represent) by positively promoting it in the eyes of the government and the public (Dovey and

Kennedy, 2006, p. 45). In such fashionable expressions of 'big data' the specific is often lost (buried

rather) in the general; in lionising the commercial scale and reach of the industry, its depth often

goes unplumbed. In his critique of delegative democracy Michel Callon is deeply critical of such big

data opinion polls (or, indeed, referendums) to tell us anything of use, because they instrumentalise

and consequently silence the very public they seek to speak for: "the public has nothing more to say

and cannot comment on what it has been made to say. The only thing that counts is the 'opinion'

that has been produced, and of which the public is dispossessed once it has been gathered" (2009).

The message the industry projects with such positivist (and positive) statistics is that the games

industry is healthy and diverse enough, and further we should be reassured that female players are

smoothly integrating into the pre-existing paradigms and structures of the industry; the final

implication being that such structures are therefore not in need of change or expensive upheaval. It

is for this reason I insist on using a small number of highly specific qualitative interviews rather than

quantitative methods like surveys in this analysis – the aim is to pick out individual voices and to see

how they discursively, performatively and politically relate to the dominant whole. Ultimately, I

claim that marginalised and emergent voices can only be fully captured through qualitative methods.

Auerbach and Silverstein define the key principles of quantitative methods as "developing scales and

questionnaires", "attempting to control for extraneous variables", and by "striving to generalize

from one sample to an entire population" (2003, p. vii). They call this approach 'hypothesis testing'

and argue that it finds its ultimate expression in the scientific method of positivist natural sciences,

which seeks to discover whether the "hypothesized relationship is actually true, using statistical

methods" (2003, p. 5). They distinguish this from qualitative methods, more traditionally employed

by the humanities, which they argue are 'hypothesis generating.' Under qualitative methods

generalisability and homogenisation is to be avoided in favour of an approach that can capture

"subjective experience, diversity, and historical context" (2003, p. vii). This is highly pertinent to my

study. For instance, a discussion of how and why the industry is shifting to new cultures of consumption and production demonstrates such causes are complex and over determined, so it is unlikely that a series of rigidly formulated questions would be able to capture that data. Similarly, it is clear from the discussion that the audience is not only broadening in terms of overall size and demographic diversity (something that ESA surveys do capture) but that it is qualitatively changing in its values and attitudes videogames (a phenomenological nuance that quantitative methods regularly overlook). This is because, as Auerbach and Silverstein ascertain, quantitative methods carry a series of rational, positivist assumptions from the hard science which assumes "people's experience is more or less the same" whilst in the field of the social sciences "diversity and difference are much more likely to be the case than homogeneity and generalizability" (2003, p. 24).

As Auerbach and Silverstein argue "this tendency to interpret difference as deficit becomes oppressive when the deficit model generates theories that are used to maintain the dominant group's power position", examples of which include the historic "exclusion of women from many public positions" because of their "excessive emotionality", which was maintained by a rationale provided by Freudian and particularly the gendered notion of hysteria (2003, pp. 24–25).[39] A key concern uncovered throughout my research arises from the historical side-lining of female designers, protagonists and gamers in a medium that has been historically normalised as male, and how recent attempts to address this, for instance through developing new types of stories with themes that speak to that diversity of experience, have been consistently attacked by traditional or 'hardcore' gamer communities intent on maintaining the status quo.

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[39] A recent thread on the DiGRA mailing list is a case in point, where a request for articles observing the overlap between gamers, toxicity and extremist communities led to a fiery debate between scholars coming from the psychological sciences, who utterly denied the veracity of qualitative approaches for not being based on statistical significance, and those coming from the humanities and sociology, who saw this as a direct attack on their scholarship and, most importantly, a way to side line and silence the subjective experiences of those who face regular harassment in gaming communities (particularly women, many of who abandoned the group in disgust at the level of disregard they had encountered from male scholars).

Many commentators have recently pushed back against this tendency to assume the de facto male player, by demonstrating not that the historical absence of women is not a natural consequence of market forces (the idea, often expressed by core gamers, that if women wanted to play games there would be more of them here) but because of decades of deliberate marketing to male audiences (Chess, 2017; Dymek, 2012; Kirkpatrick, 2015). For example, in her excellent study of the golden age of the American arcade *Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade* Carly Kocurek (2015) explicitly explores how several inclusionary and exclusionary mechanisms operated at various levels to consolidate the idea in the social imaginary that the arcade (and thus videogames) were a predominantly male leisure space. Because they are born from such historic gendering processes, it is important to look beyond such seemingly universalist, common-sense notions that games have always been or are naturally an exclusively male activity, as opposed to that very situation being the incomplete project of a historical trajectory played out through social and political forces, like those unpicked by Kocurek. In the face of an apparent homogeneity of a field, it is all the more important to continue to attend to heterogeneity of experience – to consider the outliers and the phenomena that do not conform to the prevailing pattern, but rather expose the patterns 'contructedness.'

Adopting a research position that is flexible enough to be able to work around such universalising tendencies is not only a methodological but a political imperative and such a qualitative approach is ideal since, instead of pursuing a singular truth, it has the "potential to avoid interpreting difference as deficit because it assumes that difference, rather than uniformity, of behavior is the norm" (Auerbach and Silverstein, 2003, p. 25). There is a trade-off at play in other words (as perhaps there always is in the choice of method): whilst a looser qualitative method lacks some applicability and precision, it gains an ability to capture nuances and subjective perspectives ungraspable by the rigidity of quantitative method. The choice of qualitative, interview led methodology is appropriate because whilst "variables must be defined numerically in hypothesis-testing research, they cannot

reflect subjective experience" (ibid, p. 6), in hypothesis generating research the opposite is true. My work then intends to look behind the quantitative statistics that undergird the industry's mythic sense of teleological progress to attend to the messy, subjective realities that ultimately make the industry up.

Whilst this attentiveness to difference and potentially unmeasurable data opens the door for accusations of a lack of rigor if assessed by the same rigid standards as the sciences, which sees "subjectivity and values" as "sources of bias that can and must be eliminated or controlled" (ibid, I follow the authors assessment that "subjectivity, interpretation, and context are inevitably interwoven into every research project", further they should be considered "essential" to the research "and should not be eliminated even if it were possible to do so" (ibid, p. 77). After all if the anthropological approach, as Ortner suggests, is defined by "an attempt to understand a particular social world from the point of view of the participants of that world" (Ortner, 2013, p. 25), then a certain degree of bias is inevitably bound up in the subjective perspective that is being captured – indeed this subjectivity is, paradoxically, precisely its object of enquiry. Indeed, Caldwell's approach anticipates such bias as an inevitable aspect of the promotion driven nature of the industry, and advises against being overly reliant on a single source of data to compensate for this:

> Because insider knowledge is always managed; because spin and narrative define and couch any industrial disclosure; and because researcher-practitioner contacts are always marked by symbiotic tensions over authenticity and advantage, media studies must avoid limiting research to a clean menu of disconnected methods: textual analysis, reporting, interviewing, economic analysis, or ethnography. (Caldwell, 2008, p. 2-3)

An approach to industry texts from discourse analysis is useful as a methodological tool to mitigate against such instances of spin, whilst also handling such moments as useful, and has been a method drawn on with some frequency in game studies of late (Consalvo and Paul, 2019; Ensslin and Balteiro, 2019; Paul, 2013). The object is not to redact such moments of spin or deny they exist, but to accept that they are a crucial part of industry discourses and to handle them critically as such. Discourse analysis, derived from linguistics as much as the work of Michel Foucault on discursive structures that underpin ideological formations and power relations, has developed as a practical means of performing close critical readings of utterances in order to distinguish the denotative level of what is being said from the connotative level of why it is being said. Indeed David Morley defends the interview as method from accusations of naivety (the idea that we might see it as giving us access to a fundamental truth) from its critics by stressing the important access it gives us to the discursive aspects of phenomena that discourse analysis is interested in attending to: "the linguistic terms and categories (the 'logical scaffolding' in Wittgenstein's terms) through which respondents construct their words and their own understanding of their activities" (Morley, 1992, p. 173).

James Paul Gee is a leading figure in the field of discourse analysis and his work on the topic is particularly tuned to my object of study. This is because he regularly uses games and game cultures as particularly intense examples in order to test the robustness of his models and, indeed, has written an entire book entitled *What Video Games Have to Teach Us About Learning and Literacy* which leverages that very method, demonstrating its application to games as complex systems of communication or what Ensslin and Balteiro call "a global, ethnographically and culturally diverse paradigm of our hypermediated everyday lives" (2019, p. 1). For instance, videogaming, being a passionately pursued and somewhat subcultural endeavour (Dymek, 2012), is full of jargon and such jargon is a way for members of the in crowd to exercise cultural capital (Bourdieu, 2010) through their expert knowledge, forming what James Paul Gee refers to as affinity groups:

> People in an affinity group can recognize others as more or less 'insiders' to the group… they can recognize certain ways of thinking, acting, interacting, valuing and believing as more or less typical of people who are 'into' the semiotic domain. (Gee, 2003, p. 27)

Gee discusses how such groups create and maintain the boundaries of their semiotic domain by a specific and systematic use of language, creating "'specialist' ways of talking and thinking about it ('policed' by themselves as 'insiders,' who determine what is acceptable and what not, who is adept and who not)" (Ibid., p. 37). Such semiotic policing can be used as an exclusionary tactic, devised to maintain the 'purity' of the domain by keeping out certain people and ideas. Such a practice has been well observed in the field of fan studies (Hills, 2002; Jenkins, 2012). Gee posits that "meaning is not general and abstract… rather, it is situated in specific social and Discourse practices, and is, in fact, continually transformed in those practices" (Gee, 2014, p. 103). In games culture an extreme identification with the gaming in-group and a dedication to the notion of defining the self through and within videogames has led to the construction of the hardcore (often expressed as 'core') demographic and its centrality to the commercial industry:

> The hardcore is a demographic stratum well recognised in game marketing: young men who play intensively, have disposable income, adopt new hardware platforms early, buy as many as 25 games a year, are literate about games and conventions, read game magazines, and form opinions, through word of mouth or online, about games and machines. (Dyer-Witheford and de Peuter, 2009, p. 80)

Further, my analysis of the ludology, and particularly the solidification of its terminology around the inaugural issue of Game Studies, demonstrated similar impulses at play in terms of gatekeeping around academic game studies based on the stabilisation of acceptable definitions of play.

In actor-network theory Bruno Latour's approach compliments Gee, understanding groups as the result of constant cultural labour that leaves important clues for analysts: "because groupings have constantly to be made, and during this creation or recreation the group-makers leave behind many traces that can be used as data by the informer" (Latour, 2005, p. 34). There are a variety of factors that impinge upon one another in this process: groups are formed through discourse and debate, they are formed against anti-groups, they are bolstered with resources that "make their boundaries more durable", and they mobilise professionals wielding highly specialist apparatus (Latour, 2005, p. 31). In ANT, groups are complex, dynamic entities that are always shifting and collaborating with other human and non-human actors to define themselves:

> These [spokespersons] are constantly at work, justifying the group's existence, invoking rules and precedents and, as we shall see, measuring up one definition against all the others. Groups are not silent things, but rather the provisional product of a constant uproar made by the millions of contradictory voices about what is the group and who pertains to what.... There is no group without some kind of recruiting officer. No flock of sheep without a shepherd - and his dog, his walking stick, his piles of vaccination certificates, his mountain of paperwork to get EU subsidies. (Latour, 2005, p. 31)

The revelatory nature of this way of analysing a social group is an understanding that it can never be separated from wider socio-political contexts, despite growing calls from core gamers that politics should be left out of games. For Latour (2003) this is as unthinkable as it is impossible, since for him the political is always at work any time a group's boundaries are retraced (which is more or less a constant process so long as the group persists).

The relevance of discourse analysis as a paradigm speaks to both of my foci: game text and production context. As Ensslin and Balteiro claim in their overview of the applicability of the method,

discourse analysis can be applied to the full range of actors in the production, text, player

transactional loop of meaning (2019, p. 2). My decision to read game texts alongside industry

contexts as extensions and reflections upon them operates within a methodological and intellectual

tradition opened up by Caldwell's application of Geertzian anthropology (discussed below) to

production studies, which makes it clear that not only are games texts, but so too are the cultures

that produce them: "From the 'interpretivist' turn in anthropology, I take as a methodological

premiss the notion that all cultural practices are themselves texts, each of which is an ensemble of

other texts" (Caldwell, 2009, p. 170).

Although the application of the term 'text' to a complex multimodal form like a videogame might

appear unusual, it draws on a tradition of structuralist theorists like Roland Barthes who applied the

term to all cultural artifacts, proposing that the things around us can be studied with as much rigour

as literature. This was the birth of cultural studies, which studies the texts of popular culture, of

which video games are now by far the leading entity. Assessing the term's fit to games, Clara

Fernandez Vara stresses that the term 'text' is not homogenous as its link to literature and the

written word might imply, but in the larger cultural studies tradition shifts to take on the specific

functions and affordances of the media, the example she gives being that in theatre studies text

applies both to the written play and each unique instance of its adaption in performance, and in

games this would appreciate not only the audio-visual components, the informational layer of code

base, but also the games virtuality (in a Deleuzian sense the term 'virtual' does not merely mean

'unreal' but 'as yet unrealised') in that the game state includes within it a multitude of potentialities

for its unfolding through the dynamic act of play (I can make this choice or that choice and thus

experience a different unfolding to you). As such it is, also in a Deleuzian sense, always in the process

of becoming. Perhaps most fundamentally it is useful to use the word 'text' when referring to a

variety of media artefacts because it reminds us that all these things are culturally constructed

through and in language, which acts as a kind of ground zero to meaning. As John Caputo says:

You cannot sneak around the language to get to a supposedly naked reality. So 'text' is a

technical term for a coded or textual system. It means that, even when you want to signify

something, you make use of a system of signifiers. (Caputo, 2018, p. 126)

In short, neither production studies, ANT nor discourse analysis find a sharp distinction between

types of text (though of course all such methods attend to their specificity), nor between a media

text and its site of production. Thus I find it productive to view game and game studio as parallel,

networked objects,[40] not separated by a hard break between production and consumption but

rather marked by a complex, recursive continuity of ideas and expressions between those poles.

In spite of inevitable differences between games and traditional media, it is important to attend to

more developed work in broader media industries that also seek to put texts in conversation with

production contexts such as creative media studies (Kember and Zylinska, 2012) or media

archaeology (Huhtamo and Parikka, 2011).

Particularly sympathetic to my work are the ideas of M.J. Clarke concerning industrial reflexivity put

forward in his work on transmedia television, which seeks to marry a production studies approach

with a broader ANT framework to get at the thematic links between production context and how

these are always allegorically worked into the media texts that are produced by them, or put

another way media texts are always secondary expressions of the mode of production that created

them. For instance, Clarke argues that,

all fictional programming contains trace reflexive elements by virtue of their very

construction and it is the analyst's job to pull these traces forward… illustrate how these

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[40] One characteristic of ANT that eases this parallel is its attempt to collapse macro and micro as scalar concepts, insisting that the macro must be read alongside and within the micro, and vice versa.

current works' more experimental stylistic elements place them into conversation with the industrial and organizational changes that serve as the programs' context. (Clarke, 2012, p. 18)**.**

For Clarke, following Latour's remit, the texts produced speak on behalf of the production environments that produce them and consequently reveal something significant of them. This is because texts always move through a particular culture of production where "connections are recursively established through acts of rearticulation and coordination" (ibid), by individual practitioners in a relational network. Because ANT collapses the macro into the micro so that they can be studied through the same lens (it is the relations that are important, not the scale at which these operate) it is an approach that compliments this impulse perfectly since it allows us to consider text and context not only side by side, but as extensions of one another.

Whilst discourse analysis helps to mitigate against bias, a grounded and inductive approach to research serves to ensure a robust methodology by avoiding a top down allocation of theory in favour of a bottom-up approach that takes what practitioners say seriously and builds codes and insights from their statements. My approach to grounded theory is derived from ethnographic enquiry – a term that describes the actual practice conducted by anthropologists. Such an approach "allows the researcher to begin a research study without having to test a hypothesis" because the themes of the research and therefore the hypothesis emerge from the interview data through the processes of "listening to what the research participants say" (Auerbach and Silverstein, 2003, p. 7). In short, as is recommended by ANT, the participants are treated as experts in their field of knowledge and practice. For instance, just as Auerbach and Silverstein are interested in uncovering the "subjective experience of fathers" in their Yeshiva University Fatherhood Project, I am interested in uncovering the subjective experience of developers regarding their approach to narrative in videogame design and through this their understanding of their position within the larger games

industry and its discourses. Since the developer's direct experience of phenomena on a day to day

basis has rarely been considered by games scholarship, it represents a significant gap in our

knowledge base of the kind Auerbach and Silverstein attest can best be filled by qualitive methods

such as these – precisely because they are best suited to 'hypothesis generating' rather than

'hypothesis testing'.

John Caldwell's research into production cultures is guided by a similar 'hypothesis generating'

impulse, and like me he is ultimately influenced by the cultural anthropology of Clifford Geertz, an

anthropologist considered a founding father of cultural studies due to his interest in studying culture

as a composite of texts (Geertz, 1975a). Indeed this is consistent with a larger anthropological turn in

the social sciences inspired largely by Geertz's work, and includes calls from such figures as Laura

Nader (1974) to 'study up' the social hierarchy by turning our attention to the figures "who shape

attitudes and actually control institutional structures", and therefore define our social reality.[41] In

particular Geertz's influential essay 'On the Balinese Cockfights' (2005) analyses Balinese society

through the microcosm of the games they play and the social roles that play out within them. Its

important to stress that the Geertzian approach to reading cultures through the games they play is

qualitatively and morally different to the Eurocentric and essentialising approach of Caillois that I

critiqued in the introduction. Unlike Caillois, who holds the cultural other at arm's length, placing it

in an inferior position within an Orientalist, hierarchical framework in relation to Europe; Geertz

does not seek to impose such top down and rigidly structuralist models onto his subject, but rather

uses the fluidity of a poststructuralist intellectual tradition of seeing the text as polyvocal and

heterogenous, to allow the subject to speak its own experience.

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[41] A similar impulse orchestrates Latour's (1993b) provocative work *We Have Never Been Modern*, which suggests that a series of deeply ingrained assumptions making up a kind of 'modern constitution' has traditionally maintained the Western self-perception as always in the privileged position of the analyst, and never in the subject position of the analysed which, in the tradition of orientalism, is always cast as the pre-modern 'other'.

In his study of the history and theory of Hermeneutics (the interpretation of interpretation), Wolfgang Iser reads Geertz's work as a key site of the shifts in poststructuralist thought around the function of interpretation, in much the same way Claude Levi-Strauss is famous for having applied structuralism to anthropology decades earlier. In particular Iser sees his theory of thick description as a form of the hermeneutic circle, an iterative genre of reasoning that sees the interpreter moving back and forth between text and context building a reading that bridges the liminal space that every act of interpretation needs to span (Iser, 2001, p. xii), rather than imposing *a priori* critical constructs. Consequently, Geertz is able to 'read' Balinese society as text through the ritualistic and ludic qualities of the cockfight as an example of deep play (play with very high stakes for those involved), which:

> provides a metasocial commentary upon the whole matter of assorting human beings into fixed hierarchical ranks and then organizing the major part of collective existence around that assortment. Its function, if you want to call it that, is interpretive: it is a Balinese reading of Balinese experience; a story they tell themselves about themselves. (Geertz, 2005, p. 82)

This approach to cultures as texts highlights an important point about my interest in and focus on narrative. Narrative is not only an object of analysis for my study in the sense that a research focus was how developers discussed and potentially resolved through their practice a conflict between the narrative and ludic nature of games (outlined in the introduction), but serves as a fundamental structuring form – indeed the process of the retracing of steps undertaken by the interview, in which developers attempt to recall and articulate their processes, typically takes a narrative form and is often anecdotal (an anecdote being a rhetorical form that attempts to illustrate a point through a relating a highly subjective personal experience in narrative form). As Morley points out this notion of storytelling is an unavoidable reality of our role as qualitative researchers in which we ultimately end up "telling stories about the stories which our respondents have chosen to tell us" (Morley,

1992, p. 173), but rather than see such a paradoxical situation as a limitation I follow Geertz in seeing such stories as an important route to a greater understanding.

Furthermore, my method is perfectly poised to capture this narration of experience for two reasons: firstly, because not only is the mode of inquiry understood as a 'narrative interview', as Auerbach and Silverstein attest the final step of the research methodology is to build a theoretical narrative out of the dataset, which "uses your theoretical constructs to organize people's subjective experience into a coherent story" and "employs people's own language to make their story vivid and real" (2003, p. 73); but also because the interview process can be thought of a kind of collaborative act of storytelling, where a practitioner's experiential narrative is translated into a different form of narrative register that may circulate within the academic context. In this act of translation between industry theorising into an academic theoretical context (or academic theorising), because as Iser claims all interpretations are translations as "each interpretation transposes something into something else" (2001, p. 5), it is important to preserved as much as possible the narrative components of actual *in vivo* speech so that the interpretation seeks to stay as true as possible to the subject's own self-perception, whilst also crucially recognising that they are not the ultimate authority of truth.

Just as the author cannot be approached as the source of final meaning of a text, but rather the manner in which that meaning is organised, cultural studies is not interested in finding a transcendental meaning in the text, "something essential, inscribed and guaranteed," but is concerned with the text's range of "social meanings, how they are appropriated and used in practice" (Storey, 2010, p. 50). In a sense the text comes to stand in, almost allegorically, as a cipher for reading the culture that produces it, with its thematics and stylistics reflecting the ideology and values of a larger social group. A famous example of this tradition is Raymond Williams' concept of the 'structure of feeling,' as a means of describing the whole way of life of a particular people in a

particular place and at a particular time, but only accessible as traces in the cultural works they leave

behind (the selective tradition). The purpose of cultural analysis, for Williams, is to gain access to this

obscured culture through its texts:

> What we are looking for, always, is the actual life that the whole organization is there to
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> express. The significance of documentary culture is that, more clearly than anything else, it
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> expresses that life to us in direct terms, when the living witnesses are silent (Williams, 2008,
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> p. 37).

Indeed, this is a similar but almost inverse approach to platform studies, attempting to grasp the

cultural platform through the works it produces, whilst platform studies lays the emphasis on

explaining those works by attending to the platform. It is my belief that such debates, tensions and

struggles around the epistemological and ontological qualities of the gamer as a category under re-

evaluation (explored in the previous chapter) can't help but be on the minds of practitioners

attempting to design for an audience shifting more now than ever. It is inevitable, then, that such

considerations should be present in both industry discourses and the very texts they produce. I

therefore take production context and text not as mutually exclusive objects of study, but deeply

integrated, and seek to extend production studies into the text and formal analysis of the text into

the industry. By doing so I hope to avoid the myopia or hypermetropia of over-privileging one aspect

over another as well as demonstrating their oft-neglected interpenetration.

A similar call has been made by Hesmondhalgh for sociologists to also attend to texts rather than

merely contexts and thus to break free of what Caldwell has called the "false 'text-as-screen' versus

'context-as-industry' binary" (2009, p. 171). But since Hesmondhalgh's own very macro level analysis

fails to do this, Caldwell wonders what such an "integrated 'textual-economic'" (2009, p. 172).

Examples of such "integrated research" can be found in the work of Paul Grainge (2007) on

Hollywood branding, Todd Gitlin (Gitlin, 1994) on network television, and Anne Allison (Allison, 2006) on the Japanese media mix. But I find one of the more compelling recent versions of the claim that textual artefacts give us access to Caldwell's production cultures – which is in some ways a more delineated form of what Raymond Williams' calls a 'structure of feeling', the spirit of an age that can be partially glimpsed and accessed through the media it leaves behind – is that presented by M.J. Clarke in his book *Transmedia Television* (2012). In this case the culture under scrutiny, as with Gitlin, is the production culture of America television, although whilst Gitlin was concerned with a period of relative homogeneity, Clarke's focus is the kind of prestige television that has become characteristic of the post-network era as an increasing range of channels compete for an increasingly fragmented series of niche audiences. Like Caldwell, Clarke turns to the notion of reflexivity to outline the dialogic nature of media industries and the texts they produce:

> What is needed is a measure of reflexivity… as a way of understanding of texts not simply as the results of a set of pre-given conditions, but as being in conversation with these conditions, either butting against them or participating within them, but always implicitly commenting upon them. (Clarke, 2012, p. 18)

But, whilst Caldwell restricts his analysis to the kind of 'deep texts' that circulate within production contexts, I follow Clarke in being more interested in how these bleed into and hook up with the very media texts audiences consume, and how specific studio cultures can be seen to discursively speak through these and thus reveal something about their production cultures. Indeed, this approach of reading texts as a reflection of the conditions that produced them, is already common-place in the field of transmedia studies, particularly as it was developed around what Marc Steinberg has referred to as Japan's 'media mix' (2012), which traces texts as they flow between – and in the process comment upon and help mediate – transnational and transmedial structures. One revealing

version of this is Anne Allison's account in *Millennial Monsters* of how *Power Rangers* (*Go Renjā*, Saban, 1993-1996) reflects the post-Fordist conditions of its production:

> As in *Go Renjā*, the stars of the lean production ethos are flexible workers who, though replaceable, are keenly valued for the exceptional service they give to their unit… Team spirit is cultivated, but so is individual initiative… and performance intermixes hard work, spirituality, and high-tech science. (Allison, 2006, p. 101)

Clifford Geertz provides a particularly lucid source for these ideas in an anthropological context, and his iconic reading of the Balinese cockfight resonates with Williams' claim that 'culture is ordinary,' in so much as it is not only expressed through a selective tradition of high-brow cultural texts, but in every aspect of a people's existence – what Williams (1989) famously terms their "whole way of life." His reading of cultural forms as textual constructs that grant access to a kind of structure of feeling allows Geertz to make the radical assertion that "the culture of a people is an ensemble of texts, themselves ensembles, which the anthropologist strains to read over the shoulders of those to whom they properly belong" (2005, p. 86). As noted earlier Caldwell adapts this understanding of how production processes can similarly be "read over the shoulders" of their practitioners (Caldwell, 2008b, p. 26). This insight leads Geertz to propose a radical fusing of methodological approach that puts anthropology in touch with textual analysis where such cultural forms are considered "imaginative works built out of social materials" (Geertz, 2005, p. 83). For my purposes a videogame, as much as a cockfight or the production context it emerges from, can be considered such a "collectively sustained symbolic structure" (Ibid.) open to such interpretation.

Another conclusion Geertz draws from this insight is that these cultural forms don't merely reflect society as it is, but actively mediate it, helping to discursively bring it into being:

Subjectivity does not properly exist until it is thus organized, art forms generate and regenerate the very subjectivity they pretend only to display. Quartets, still lifes, and cockfights are not merely reflections of a preexisting sensibility analogically represented; they are positive agents in the creation and maintenance of such a sensibility. (Geertz, 2005, p. 85)

Casey O'Donnell has demonstrated Geertz's relevance to game studies by doubling down on this reciprocity of cultural forms in relation to the wider social context, urging his use as an antidote to the overly clean theories of play exemplified by Brian Sutton-Smith and Johan Huizinga that continue to hold sway in games studies. Instead Geertz gives a messier account of the complex ways, "games are in/and/of/through culture" (2014, p. 411). Echoing elements of Geertz, Williams, Caldwell, and Clarke, he concludes:

Games, play, and culture are enmeshed and entwined in ways that intimately implicate one another. Games produce culture. They reflect it back. They shift it. Mainstream games in particular contribute to and reinforce hegemonic cultural projects. (O'Donnell, 2014, p. 407)

For O'Donnell, such ethnographic accounts of play as situated and empirical entanglements move game studies beyond the formalist debates explored in the introduction and into a deeper understanding of the role they play in a greater social context. Geertz's method is also grounded and pragmatic, using thick descriptions of the object of analysis in order to reject top-down theorising. In his words it, "open[s] up the possibility of an analysis which attends to their substance rather than to reductive formulas professing to account for them" (Geertz, 2005, p. 86). In ANT terms it avoids 'social explanations' by attending to real relations between actors and in the terms of production

studies it takes seriously the industry theorising that happens 'in the wild' and is supported by what

Caldwell refers to as 'deep texts' (and which are explored in detail in the following chapter).[42]

Fundamentally, Geertz's essay collapses Huizinga's hallowed concept of play as a "world apart" safely sealed off from culture in a pristine magic circle, "where different laws pertain" (Huizinga, 2016, p. 14). Rather ritualistic acts of play are deeply ingrained in wider cultural contexts that they are both formed by and form in turn, and the messiness Geertz finds in the process of reading cultures as texts jars with both Huizinga's notion that play, "proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner," and his notion of deep play as deeply invested with real social goods (status in the Balinese example) rejects utterly Huizinga's claim that, "no material interest [and] no profit can be gained by it" (Huizinga, 2016, p. 14). Since Huizinga's tidy and hermetically sealed notion of play has been hugely influential upon formalist and ludological definitions such as Juul's classical game model (Juul, 2003) explored in the introduction, it is clear that a Geertzian critique of Huizinga can also be extended to a critique of orthodox game studies more broadly, as per my fuller critique of Caillois.

Indeed, the work of a cultural anthropologist working with premodern tribes in Bali or with Algerian Berbers is not so far-fetched an application here, since his work has already been embraced within game studies. Casey O'Donnell's has adapted this work directly to game studies through an essay that acts in homage to Geertz (2014) suggesting that, even if it doesn't mention it directly, his larger anthropological enquiry into the games industry, *Developer's Dilemma,* is also clearly informed by Geertz's work. This demonstrates that, despite working in separate fields of enquiry, both Caldwell's production studies work on the film industry and O'Donnell's equally probing account of the games industry are united by a Geertzian appreciation of the linkages between the things cultures produce

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[42] This is a term that itself echoes Geertz's use of 'deep play,' which he uses to describe a game with sufficiently high stakes that it reveals something meaningful about the actors involved (Geertz, 2005, p. 77).

(especially games) and what this tells us about the ways they think, whilst also avoiding totalising statements about these.

Geertz has an operational view of science, which suggests that to find the essence of a discipline you shouldn't first look to its findings but to its methods; "at what the practitioners of it do", because more importantly than a list of what must be done, method must reflexively attend to its rationale, "the kind of intellectual effort it is" (Geertz, 1975b). In the case of anthropology, Geertz finds this *modus operandi* to be 'thick description'. Although originally a term borrowed from Gilbert Ryle, it was developed by Geertz through his career into his own strong theoretical programme. This concept is laid out most clearly in his 1973 article on the topic, which describes thick description as a rich and layered form of explication that seeks to capture not only the phenomenal experience of the actors (how they see and organise their world), but to place it in relation to their context (the structures that constrain and shape them). In this sense it operates similarly to the role of description in ANT, which seeks to "trace a network" as "a string of actions where each participant is treated as a full-blown mediator" (Latour, 2005, p. 128).

Indeed this semantic link to ANT is made explicit by Geertz who says "our formulations of other peoples' symbol systems must be actor-oriented" (Geertz, 1975b). The point is to take the actors accounts seriously, a position I fully embrace along with Caldwell, O'Donnell and Geertz. However, for ANT thick description is taken to somewhat idealistic extremes in an effort to *completely* trace the network so that "if a description remains in need of an explanation, it means that it is a bad description" (Latour, 2005, p. 137).[43] Latour isn't merely being perverse here. For ANT such thick description is the best defence against what he calls 'social explanations'; big theories that are

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[43] Incidentally, Latour's response to this is to enhance the scope of the enquiry: "the number of actors might be increased; the range of agencies making the actors act might be expanded; the number of objects active in stabilizing groups and agencies might be multiplied; and the controversies about matters of concern might be mapped" (Latour, 2005, p. 138). This is all very well in theory but does not help one get a PhD finished.

frequently deployed from above to define social reality in a *nutshell*, and thus to evacuate much of

its contents. Such ideas are often understood as metanarratives in postmodern thought – all-

encompassing ideological explanations like Marx's class struggle – and were famously rejected by

Lyotard who said: "the grand narrative has lost its credibility, regardless of what mode of unification

it uses, regardless of whether it is a speculative narrative or a narrative of emancipation" (1984, p.

37).[44] For ANT this broadens to include (or rather exclude) even smaller explanatory apparatuses like

Bourdieu's theory of habitus. So we find ourselves in a methodological quagmire; unless it is possible

to trace a network in its entirety (which it often isn't given their internal complexity as well as their

openness to other networks, not to mention issues of secrecy pointed out by O'Donnell) we must

give in to *a priori* explanation, which threatens to misrepresent the actors and thus sink us deeper

into the quicksand of uncertainty.

This is the point on which I break with ANT's impish radicalism, favouring instead Geertz's pragmatist

position that such social explanations like "the principle of natural selection" can still be useful

provided they are not thought of as totalising in the sense that such a concept can't "explain

everything, not even everything human, but it still explains something" (Geertz, 1975b). Even Latour

grudgingly concedes that until a network is fully traced, a social explanation may stand as a

convenient heuristic, as long as we fully accept it as such. Theories then, when deployed judiciously

and self-consciously, are a perfectly acceptable part of thick description mostly because, as Geertz

asserts, no intellectual inquiry can be constructed *ex nihilo*; a researcher cannot act hermetically

sealed off from prior intellectual influences. Just as there is "no outside to ideology" (Althusser,

2008), there is equally no way out of the world of concepts. For Geertz theory is always at play

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[44] Even before this the philosopher Paul Ricouer had famously critiqued this impulse towards totalisation that he saw as characteristic of modernism and most clearly expressed in the work of Freud, Marx and Nietzsche. Calling it 'the hermeneutics of suspicion', he posited that these thinkers, despite their vast political differences, were unified in that they all sought to excavate a hidden fundamental truth, and each saw their particular theoretical programme (psychoanalysis, class praxis, the will to power) as the only way to reach it (Ricoeur, 1977).

whether we want it to be or not, making methodological attempts to bracket it off rather

disingenuous:

> "Although one starts any effort at thick description, beyond the obvious and superficial,
>
> from a state of general bewilderment as to what the devil is going on—trying to find one's
>
> feet—one does not start (or ought not) intellectually empty-handed." (Geertz, 1975b, p. 27)

Indeed, thick description should not be thought of as pure observation, but situated and informed

observation. Geertz rejects the notion of objectivity, because an observation alone cannot

distinguish between a phenomena and its causes and motivations – for instance between an

involuntary twitch and a deliberate wink – thus, thought and context need to be brought equally to

bear on any act of interpretation.

Geertz's theories also allow us to productively reframe the problem of 'insiderness' that media

ethnographers like Sherry Ortner have wrestled with when dealing with closed off ecosystems like

Hollywood (2013, 2010). Because Geertz's concept of deep play is always, "about the field that

surrounds the game and its broader context," the analyst is also always already implicated in the

event and positioned "in interesting ways" (O'Donnell, 2014, p. 409). For Latour, whilst the

researcher should start the process of enquiry with a degree of uncertainty, treating all actors as

equally valid, they are inevitably and unavoidably part of the formation of the thing under scrutiny

and therefore, "part and parcel of what makes the group exist, last, decay, or disappear" (Latour,

2005, p. 33).

The impossibility of being an objective observer raises a series of problems the chief of which is the

influence you might have on the research subjects. Reflecting back on a project that involved

interviewing professionals within the television sitcom world, Brett Mills notes that although his

intention had been to "find out what industry members do, rather than force them to reassess those practices" (2008, p. 149), he none-the-less found that respondents told him that they were reassessing their practice and status in light of the critical probing of his questions. The fact that Mills' enquiry had resulted, through their encounter with a critical tradition of enquiry in the humanities, in a kind of unintentional action research, is a perfect illustration of the impossibility of conducting anthropological research without effecting (and in some small ways changing) the culture you study. Rather than think about academia, therefore, as an externality to the industry and its controversies, we must think of the analyst in a similar manner to action research methods designed to intervene in and progressively transform the objects of study (Greenwood and Levin, 2006).[45] Both scientific and anthropological researchers are vital parts of the networks under scrutiny, inevitably altering them by their presence.[46]

Whilst Geertz's cultural anthropology and ANT approaches both take into account that the researcher is always unavoidably a part of the network under scrutiny, ethical considerations as those raised by Mills do demand a certain degree of caution and self-reflexivity in approach. However, whilst Mills' subjects were unfamiliar with being interviewed in their roles, it is my belief that everyone I had spoken to were already familiar with discussing their creative practices through press interviews, publicity materials or public facing social media, and thus less likely to be overtly influenced one way or another by our encounter. Even so, because the researcher is unavoidably part of the network under scrutiny, my precautionary stance is that it is essential that the qualitative researcher "acknowledge their own subjectivity and values, and reflect on them in a systematic and disciplined way" (Auerbach and Silverstein, 2003, p. 27). It must be noted at this point, in the spirit

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[45] Indeed, more than ever, game scholarship is seeking to challenge rather than merely record the current status quo as evidenced by Ruffino's call to intervene in and change the dominant narratives in gaming cultures (2018a, p. 13).

[46] Indeed, as in the case of Geertz, a certain involvement in the Cockfight was essential for him to be accepted by the community under scrutiny, who then felt comfortable enough to share their innermost thoughts with an outsider (2005, p. 59).

of openness, my own relationship to the games industry, though I hope any biases I may hold are mitigated by the methodology laid out here. Indeed, in her book on semi-structured interviews Anne Galletta stresses that the interview protocol can, indeed should, be informed by "your experience, including your autobiography and your understanding of the research context" (2013, p. 11). In this sense my own experience in the industry is not suspect but welcome, provided it is framed by sufficient critical reflexivity, without going so far as to "[slip] into an infinite regress of self-absorbed concern with our own subjective processes, and to manage our subjectivity, rather than to be paralysed by it" (Morley, 1992, p. 181).

The term 'acafan' emerged from the first wave of fan studies literature, spear-headed by Henry Jenkin's *Textual Poachers* (2012), who later reflected on the term's attempt to delineate and manage the split between his academic and fannish identities: "We wanted to signal a dual allegiance -- to treat our subcultural knowledge as part of what informed the work we were doing as scholars" (Jenkins, 2011). Later work in fan studies, notably *Fan Cultures* by Matt Hills (2002), are more overtly critical of the ease with which Jenkins claimed to be able to take on and put off these two identities, and sought to ground and interrogate the identity of the researcher through a process he refers to somewhat problematically as autoethnographic,[47] which stages a critical encounter with one's own autobiography. This challenges the, "person undertaking it to question their self- account constantly, opening the 'subjective' and the intimately personal up to the cultural contexts in which it is formed and experienced" (Hills, 2002, p. 72).

Despite my reservations as to its effectiveness, I here briefly summarise my own personal connections with the domain of videogames in the form of such an autoethnography. Following

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[47] Although there is always a degree of reflexivity that must accompany any anthropological process, this tends to be a matter of the ethics of an encounter between the self and the society under scrutiny, in order to explore the unchecked assumptions one brings in from the outside, and so it remains to be seen whether one has the critical distance needed to apply the same logic to the internal divisions of the self.

university, I found my way into film and videogame criticism through contributing to or editing a number of now defunct regional magazines and websites including: *Maddog Magazine* (a free East Anglian arts and culture magazine with extensive reviews and interviews); *Rhythm Circus* (a website covering the whole gamut of media in review, preview and interview formats); and *Ready Up* (a specialist gaming blog four times nominated for 'Best Gaming Blog' at the *Games Media Awards* between 2010 and 2013, where for over 8 years I wrote reviews, acted as a features editor, presented podcasts and game streams). For over a decade, these experiences placed me in constant contact with the extensive promotional apparatus of the videogame industry, including the myriad in-house and third-party publicity firms that handled advance previews, promotional events, interview opportunities, and early embargoed review copies. My experience in games journalism gave me a great insight into the promotional apparatus and post-production network that connects the act of production to the moment of consumption, but also gives me a privileged insight into the kinds of rhetorical forms and tendencies often at play within the promotional hype-cycles of game production, in which games journalists become 'cultural intermediaries' between publicity departments and the user base (Kline et al., 2003, p. 45).[48] I have also worked as a quality assurance tester for renowned game developer and publisher Square-Enix, specifically on the localisation of the game *Nier* (Square-Enix, 2010). Whilst quality assurance can be seen as an ancillary games industry role, it does give a privileged point of view into the post-production and distribution apparatus of the industry, since the process of testing game builds and reporting bugs expose some of the edges of the industry's obscure processes (just as the 'debug tools' used to ease the QA process allowed limited access to the hidden codebase).[49]

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[48] Although Kline et al. are drawing on a term from Bourdieu (2010) here, in ANT terminology the journalist is a mediator, not an intermediary, since they would rarely merely pass on the message without changing it in some way (although there is a tendency in games journalism, especially around news reporting, to reproduce the language of press releases with minimal editorialising).

[49] It also provides a prime example of the secrecy of the industry noted above since the job involved having extensive early access to games months before release, we had impressed upon us in the strictest terms the fact that taking anything from the office was a fireable offence.

Hermeneutic theory, as argued by John Caputo (2018) and Wolfgang Iser (2001) fundamentally rejects the notion that interpretation is a natural process,[50] just as ANT is opposed to the positivist notion that there is a naked truth to be discovered through the interpretive act. Because hermeneutics is a reflective theoretical understanding of interpretation – a kind of 'interpretation of interpretation' as Caputo has it - one does not intentionally pursue a hermeneutic method, rather all acts of interpretation are always already such hermeneutic acts. So being aware of the theories and assumptions that govern ones thought processes is essential. In terms of my academic training and background (in literary and film studies), my intellectual agenda began play in a less explicit form as a generalised approach to structures that stresses their diffuse and heterogenous qualities (what Bakhtin would call their polyglottal or dialogic qualities), which for the sake of convenience could be called 'poststructuralist' (the academic approach in which I was originally trained). However, over the course of the project this developed into a more specific form as I began to be exposed to actor-network theory, a sociological paradigm to which my thought processes and ways of seeing the world became increasingly aligned.

Hermeneutics is not a top down model providing a complete explanation of the phenomena – as in Marxism for instance – what Iser calls a "grandstand view" where theorists ultimately "shape[s] that reality according to their presuppositions" (Iser, 2001, p. 2), but a bottom up, emergent and recursive approach that clearly fits the language of games as cybernetic (Aarseth, 1997) and procedural systems (Murray, 1997), as well as the model of coding put forward by Auerbach and Silverstein. The opposite to the totalising grandstand view is also false: the idea that the interpreter can be totally absorbed in the text in an acts of self-effacement that brackets off their human concerns (the dream of early forms of anthropology). Iser encourages us to say instead of what is interpretation, why is interpretation. So instead of asking what the games industry is – quite a big

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[50] Because of the pervasiveness of the interpretive process to our function as a species (we are interpretive animals) acts of interpretation have routinely taken for granted.

question to settle categorically – the overarching concern here is why it appears to us to be this way (and in particular why it appears to the practitioners themselves to be this way). It also links us to a Foucauldian historicist approach that seeks to address the contingent factors of history rather than search for ultimate causes, or as Foucault himself puts it in far more eloquent terms:

> History is the concrete body of a development, with its moments of intensity, its lapses, its extended periods of feverish agitation, its fainting spells; and only a metaphysician would seek its soul in the distant ideality of the origin. (Foucault, 1991a, p. 80)

Between these two stances then – the complete effacement of the self that treats interpretation as an idealised 'ascetic discipline' freed from prior interest and the materialist totalising view of the world in the grandstand view of metanarrative or social explanation – lies a series of methods that are iterative and recursive;[51] slowly building up a picture of the network and its larger context through what Iser calls 'the hermeneutic circle', what Geertz calls 'thick description' and what Latour calls 'translation'.

For Geertz context is something that needs to be deliberately rolled into the enquiry, but for ANT it is seen much more radically as an emergent feature produced by the actors within a network and so when you fully "deploy the content with all its connections," then inevitably "you will have the context in addition" (Latour, 2005, p. 147). But even so there is a caveat here as the description should not be taken for the object being described (the map is not the territory, after all) and "you should not confuse the network that is drawn by the description and the network that is used to make the description" (Latour, 2005, p. 142). Since the gap between the analysis and the object

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[51] One such method explored by Iser (2001, pp. 84–87), but beyond the scope of this thesis despite its strong fit with the iterative nature of games, is that of Norbert Weiner's (2013) cybernetic theory, where principles of homeostasis (adaptation of the organism to the environment) and servo-mechanisms (mechanisms whereby outputs are measured and feedback to modified and improve the system's input), provide feedback loops that lead text and context to co-create one another in a recursive manner.

cannot be fully closed, indeed for Wolfgang Iser this is the liminal space that always and unavoidably opens up in any act of interpretation (Iser, 2001, p. xiv), there is always space that needs to be filled by theory. I personally feel it is as true to say that actors generate their own context, just as much as it is to say their actions are shaped by a larger context beyond their reach. I believe that this is thoroughly born out by my investigation, particularly my argument in chapter 3 on the interdependency between the indie and AAA sectors of the games industry.

What ANT lets us do is to bear in mind the performative function theory takes on since by creating theories sociologists "perform the social in all practical ways... they not only format the social but also provide a second-order description of how the social world should be formatted" such theories are at their most hazardous, then, when they are sealed and taken for granted where they may act as "so many standards circulating along tiny metrological chains" (Latour, 2005, p. 232). Such a warning is also to be found in Geertz, where the opposite of inscription (thick description) is specification (diagnosis) – which is to say, what Caillois was undertaking in his study when he sought to "define the society's moral or intellectual character" (2001, p. 82). It is between denotative thin description and connotative thick description where "lies the object of ethnography: a stratified hierarchy of meaningful structures in terms of which… [things] are produced, perceived, and interpreted, and without which they would not… in fact exist" (Geertz, 1975b, p. 7). The very liminal space that hermeneutic theory bridges can itself be thought of as a complex actor-network of linkages between text and context, and thick description helps us to fill in this network. The important thing, in thick description or in tracing networks, is that the model is inductive (moving from actor to network) rather than deductive (moving from network or larger theoretical frame to actor), or for that matter reductive (seeing the actors as only constrained by larger networks of power). In the words of Geertz: "the aim is to draw large conclusions from small, but very densely textured facts; to support broad assertions about the role of culture in the construction of collective life by engaging them exactly with complex specifics" (Geertz, 1975b, p. 28).

I do not mean to claim here that I am the first academic to boldly go towards the final frontier of semi-structured interviews in a production context. Although O'Donnell's *Developer's Dilemma* is one of the only sustained book length studies, the method has appeared in articles by a number of scholars including Brendan Keogh (Keogh, 2019a), Tom Phillips (Johnston and Phillips, 2016; Phillips, 2016; T. Phillips, 2015), and Allison Harvey (Fisher and Harvey, 2013). Although their methods (focus groups) differ from mine, Tom Phillips and Keith Johnston's work on transmedia collaboration between the British TV and game industry resonate with my efforts here in their attempt to "[move] away from the products of transmedia experiences to the people who make them (or who struggle to make them) and how they describe changes to existing practices" (2016, pp. 43–44). Another recent study by Laureline Chiapello on the changing role of the designer within the casual gaming space reinforces my observations about the lack of such studies that "considered game designers as the holders of a specific knowledge" (2016, p. 48). Like me, Chiapello uses semi-structured interviews but briefs the participant more heavily before-hand using a 'sensitizing tool' in the form of a "booklet informed the participants of existing theory on casual games and provoked questions and reactions concerning their own experience" (ibid, p. 51). Since part of my objective was to encounter spontaneous moments of industry theorising, I deemed this particular approach too structured.

However, such work remains an outlier, and rarely is the philosophical underpinnings of the method as heavily discussed as it is here. In practical terms my project shares much in common with Jesper Juul's (2011) influential study of the shifting demographics of videogame audiences in the contemporary moment: *A Casual Revolution*, which draws on interviews with developers to back up its argument. This book uses a kind of thick description that draws on interviews with developers and players (setting out "to give more equal weight to players, games, and developers too" (Juul, 2012, p. 147) in order to deductively construct theoretical models that can further bring into focus

both the texts and contexts of the emergent form of casual games and their audiences. Concerns with his earlier classical games model aside, this excellent book charts with delicate insight the emergence of casual gaming in the first two decades of this millennium, and the demographic and technological shifts it caused and which it was in turn caused by.

A particular methodological concern he has is to overcome a dichotomy in game studies between textual formalism (which ignores the player's experience in favour of the text's function) and contextually based ethnography approaches (which ignores the text's meaning in favour of the player's response). Indeed, this is strikingly familiar to Caldwell's attempt to fuse cultural studies and political economy in an attempt to overcome a false dichotomy in screen studies between the formal approach to the text and the anthropological approach to the production context, and it is curious how each field encounters similar intellectual impasses and goes through similar methodological mutations. These two approaches, he argues, have often been posited as mutually exclusive, summarising this tendency as a "competition between player-centric and game-centric views of how games and players should be understood" (Juul, 2011, p. 53). Such a dichotomy must be overcome, Juul argues, because it creates a false division in research that only shows a partial picture of the phenomena in question:

> Thinking in terms of video games, we are free not to choose between games and players in the first place: since there is no scale by which we can measure the role of the player (and context) against the role of the game, any claim of one being more important is highly dubious. In fact, it is clear that while different players use and understand a given game differently, players also have preferences for different games, so neither players nor games can be ignored… (Juul, 2012, p. 147)

For Juul, game design is affected by and effects in turn demographic shifts, and for him the situation

created by casual games demonstrates this unavoidably, since by pivoting so much from traditional

notions of what games are they expose the mechanisms by which such discourses are constructed –

something recently further explored by Mia Consalvo and Christopher Paul (2019) in their book *Real

Games*, which deconstructs the growing gamer dismissal of the kind of casual games Juul is analysing

closer to their point of emergence. I follow Juul in concluding a certain reciprocity in game culture

between development and audience, which in line with Foucault's view of discourse bring one

another into being. As Juul states:

> Game audiences and game designs co-evolve. The audience learns a new set of conventions,
>
> and the next game design can be based on the assumption that the audience knows those
>
> conventions, while risking alienating those who do not know them. (Juul, 2012, p. 10)

Although sharing something in common with earlier abstract games like *Breakout* (Atari, 1975),

Tetris (Pajitnov, 1994) and *Columns* (Geertsen, 1989), casual games can be seen as a particular type

of game emerging at a particular historical moment. They include games frequently played on

mobile phones and tablets such as *Diner Dash* (Gamelab, 2004) and *Bejewelled* (Popcap, 2001), as

well as games that emerged on social media platforms like Facebook, including *Words with Friends*

(Newtoy, 2009), and *Farmville* (Zynga, 2009). Typically free or very low cost and simple in design,

such games were typically played by new audiences of older and/or female gamers (Chess, 2018;

Soderman, 2017), and were frequently dismissed as 'fake' games by core gamer audiences. As Juul

mentions, casual is itself a somewhat problematic term, not only for its dismissive tone, but as a

descriptor it doesn't fully capture the realities of these types of play. Juul points out that casual

players often demonstrate a hardcore level of commitment to their games, often playing hours a

day, and meanwhile players who once considered themselves hardcore often fall away from the

hobby as a result of the extreme demands games increasingly make on player time and household

finances. Juul's argument throughout the book is that as casual games become normalised in wider social discourses they not only question the prevailing conception of games and their players, thus challenging developers to reconsider their choices, but deconstruct the typically negative assumptions and stigmas surrounding games and play often deployed in the mainstream media. Casual games are at the vanguard of a process of broadening and diversifying the audience of gaming in a way not seen since the early arcade boom or the initial home console invasion, rewriting the very rules of the medium. As shown by Juul, they are also challenging methodological assumptions around the clear boundaries between text and player-based approaches to their study.

Throughout this thesis I see indie games undertaking a similar paradigm shift, certainly overlapping with that of causal games but also crucially different (some of these differences are explored in chapter 3), and thus my work can be seen as a companion to and a development of the kind undertaken here by Juul[52] but also by other writers interested in the broadening of the medium including Shira Chess (2017), Anna Anthropy (2012), Brendan Keogh (2018a), Paolo Ruffino (2018a), Bonnie Ruberg and Adrienne Shaw (2017a; 2015). This is to name but a few voices I see as constituting a significant new wave of game studies scholarship emerging (often in direct conflict with the older models of game scholarship I termed orthodox game studies in the introduction). This new wave of scholars are attempting to articulate the massive demographic shifts that are occurring in contemporary gaming cultures and discourses, centred around the diversification of game audiences and practitioners across lines of gender, race, sexuality and other forms of traditionally marginalised identities – not to mention as a response to the industry's feverish, faltering and fragmented attempts to orientate itself in relation to these new realities and consumer segments.

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[52] Juul is a fascinating figure because his work spans both the traditional game studies orthodoxy and this new moment, demonstrating significant shifts in attitude that I do not have the space to fully articulate here.

Ruffino (2018a, p. 18) has stressed that the complexity of videogames gives the impression of an, "unstable foundation from which it is impossible to speak," but, "making a cut, one point, in these ongoing processes of mediation" is essential in entering into any complex network. Once the cut is made, the associations can be traced from it. The means by which this thesis makes such a cut is via semi-structured interviews with a range of videogame practitioners (Appendix A provides the full list with brief biographies and ludographies) working in various sectors of the industry, but all were involved in work around crafting narrative content (either as studio leads, narrative designers or level designers whose job it is to make the narrative fit in the digital spaces they design). In line with the above justification of qualitative methods, such interviews are designed to capture and analyse the subject experiences of game developers who act as experts. To evoke Latour again, such interviews are necessary to any enquiry seeking to describe the subjective experiences of a group because: "without collecting statements, how could the collective be collected?" (2005, p. 232).

The versatility of the semi-structured interview makes it the ideal form to approach and reveal the subjective experiences of the actors described above, since it is inductive, iterative and reciprocal in nature (Galletta, 2013, p. 24). As argued by Anne Galletta it is an approach perfectly suited to putting empirical narrative (the kind of 'layman theorising' that Caldwell refers to) in dialogue with theory since it leaves, "space for study participants to offer new meanings to the topic of study" (2013, p. 2). In short the interviews allowed me to explore how the political, technical and financial realities of game production (the technosocial network) potentially restrict or encourage the implementation of narrative at the micro level of the actor, and how the designer's intentions potentially shift as a result (an act of translation in the network). To draw on Latour's concept of politics as a mode once more, they allow me to see how and in what circumstances actors retrace the boundaries of their group.

Moreover, semi-structured interviews are effective when utilised as part of a mixed methods approach such as that utilised by Caldwell and Juul in order to deal with the self-promotional nature of production cultures, since they allow for the testing of claims and memories of the practitioners by triangulating them against other types of evidence. Although I was unable to conduct participant observation, I was able to draw on a variety of existing press interviews and conference presentations which expand upon and compliment my own interviews. The use of such supplementary resources are encouraged by Galletta's methodology and is a process sherry Ortner terms 'interface ethnography,' which involves, "doing participant observation in the border areas where the closed community or organization or institution interfaces with the public" (2010, p. 213). This allows the researcher greater access to otherwise obscured industry reflexivity by drawing on the various projections made by the industry into the public sphere that precede or overlap the research.

Interviews were typically 45-70 minutes long and were conducted over the summer of 2015 using the VOIP software Skype. Skype is now generally reliable enough in terms of call quality to justify its use in such interviews. Indeed, the limiting factor is now not typically the software but the hardware utilised in the call (i.e.: the infrastructure of the broadband internet at each end of the call), and game developers are generally high tech individuals with access to such technology, making the risk of call dropping negligible (although there were still a few instances of poor call quality leading to misheard words, but this was rare). Consequently, the interviews were kept to audio only in order to mitigate against potential quality drops.[53] Interviews were recorded using the software MP3 Skype Recorder (with the participant's agreement) and the recordings were later transcribed from these files. There is an understandable bias in the social sciences towards face to face interviews, but this

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[53] I conducted one face to face interview with Dan Pinchbeck of The Chinese Room, who courteously invited me to his studio in Brighton whilst I was also in town for the large industry gathering Develop. I note my observations of the nature of the studio briefly in chapter 3, but in general I regret that I didn't have the opportunity to mix my interview methods with more direct participant observation, as Caldwell and O'Donnell have done in their own studies.

is, I feel, largely due to the majority of projects being centred around studies with vulnerable groups where rapport building or the observation of body language is vital. Such concerns did not relate to my study and whilst it might have been nice to see such body language, the discourse analysis focus of the coding of spoken utterances meant that this was unnecessary.

The lack of participant observation to accompany interview material and contribute to the kind of mixed method triangulation of data that Caldwell calls for might be seen as a weakness to my study Like David Morley, in his interview led studies of TV audiences, "I am left only with the stories that respondents choose to tell me", however such stories are not without value (indeed my entire method turns on the value of analysing the kinds of stories that circulate inside and outside texts as discourse) as Morley iterates they are, "themselves both limited by and indexical of, the cultural and linguistic frames of reference which respondents have available to them through which to articulate their responses" (Morley, 1992, p. 172).

Another more practical reason[54] that dictated the use of interviews over VOIP software, rather than face-to-face interviews or participant observation, was that since the games industry is highly decentralised and international, with a large cohort of developers based in America and western Europe, it simply wouldn't have been representative to limit my study to Britain, nor was it financially viable to conduct exclusively face to face interviews. Unlike the film industry where anthropologists tend to be drawn to Los Angeles and Hollywood (Caldwell, 2008b; Ortner, 2013; Powdermaker, 1951) as the core centre of film production, no such site exists in games where the industry is centred around a high number of geographically dispersed creative communities, as is illustrated by UKIE's interactive map of the British videogame industry (UKIE, 2018). Although the

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[54] Practical choices and limitations are an intrinsic part of research planning and always involve compromises. Indeed, David Morley asserts that believes "all questions of methodology to be ultimately pragmatic ones, to be determined according to the resources available and the particular type of data needed to answer specific questions", as such all methodological choices "incur what an economist would call an 'opportunity cost'—in terms of the other possibilities excluded by any particular choice of method" (Morley, 1992, p. 12).

sites of game production are often major metropolitan cultural centres or capital cities such as Montreal, San Francisco, Prague and Kyoto to name a few, this is by no means a universal rule. For instance, Leamington Spa, Guildford and Dundee in the UK eschew this trend developing as a result of quirks in the growth of the national games industry,[55] and evolving into what Richard Florida famously termed 'creative cities' (Florida, 2009).

Questions were based on what seemed important areas of enquiry that arose from the literature review discussed in the introduction, which focused on a historical articulation of the tensions between gameplay and narrative in the videogame industry and its scholarly apparatus. However, as Auerbach and Silverstein caution, in qualitative methods "one cannot assume that current literature can provide an adequate set of questions", especially as the research is intended to shed new light on an untapped perspective. The flexibility and improvisational qualities of the semi-structured interview thus allows for opportunities for the emergence of new insights: "provid[ing] the participants with opportunities to bring up unanticipated topics" (Auerbach and Silverstein, 2003, p. 16). Thus, the interview concentrates on allowing the participant to build a "narrative" account of their experiences that is actor-centred. In this sense the research participants are used as a "source of knowledge" because "they are experts on the phenomenon being studied" (Auerbach and Silverstein, 2003, p. 27) and the purpose of the interview protocol is to "learn about their lived experience" (2003, p. 15).

Outlining my approach is one thing, having it accepted is quite another. Outside of a handful of examples, most emerging in recent years (Heineman, 2015; Juul, 2012; Pearce, 2002; Ruggill et al., 2016), game studies has remained immune, even hostile, to the notion of interviewing industry.

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[55] For instance, Bullfrog and Codemasters were important studios centred on Guildford and Leamington Spa respectively, and the presence of so many studios in Dundee is largely down to the presence of Realtime Worlds, a huge studio that spun off into a number of smaller outfits when it imploded in 2010, as well as the establishment of the Centre for Excellence in Computer Games Education at Abertay University. Leamington Spa is known colloquially as 'silicon spa' for its ability to attract and maintain the tech industry at large.

Indeed this is typically an approach associated with games journalism (Ellison, 2015; Schreier, 2017a) giving it an informal association from which a serious discipline in the process of gaining credibility in the halls of the academy wants to distance itself. For a young field struggling for acceptance (and resources) in university departments, interview methodologies are even more suspicious than they already are in relatively established disciplines. For instance, Mills reflects on this in his experience of interviewing TV comedy writers:

> Despite television studies' attempts to demonstrate that "popular" cultural forms are of significance, it is quite clear that working on entertainment (and especially comedy) seems to require some kind of explicit justification (quite unlike research carried out on more "serious" topics such as news and documentaries). (Mills, 2008, p. 148)

Newcomb and Lotz also note the general side-lining of producers in media studies since the mid-1980s and link this to the tendency to dismiss the context of entertainment production in terms of a generalised concept of it being a, "'factory product,' standardized content emerging from routinized production processes" (Newcomb and Lotz, 2002: 62). Indeed, just as Auerbach and Silverstein argued above that qualitative methods are sneered at due to the assumption that peoples subjective experiences are essentially all the same, so too is there an elitist assumption that persists in academia that popular cultural products, and therefore the producers that make them, are interchangeable.[56] This attitude can be found in game studies itself: for instance in a discussion of in-depth interviews as a research method in game studies, Amanda Cote and Julien G. Raz memorably reinforce this dismissiveness by commenting that "while games are developed in a studio, at least part of their meaning and significance is created at the moment of play and through the people who

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[56] Indeed, such an attitude, which can also be seen in the side lining of game studies in humanities departments, persists in spite of the fact that a core tenet of the challenge cultural studies mounted upon the academic establishment was to take seriously the works and objects of popular culture (Gay et al., 1996; Williams, 1989).

play them. As researchers, therefore, we find that many of our questions can best be answered through our own interaction with gamers" (Cote and Raz, 2015: 93). And with that the practitioner interview is consigned to the methodological dustbin. Whilst the scope of the field has stretched as far as bringing the player into the equation in recent years (Newman, 2012; Pearce et al., 2011; Thornham, 2011), considerations of the developer are consequently still a novelty.

One of the reasons for this neglect is that Cote and Raz worry about the reliability and depth of industry testimony as, "highly managed, corporate responses" (2015, p. 105), citing the example of a developer who stressed that he would give precisely the same answers to a game journalist as he would an academic as a reason to write off the method; after all, if academic interviews are going to be treated by the participant in the same way as a consumer website what value could they have? I disagree, seeing instead the familiarity developers have with the journalistic interview as an advantage. Because a question informed by scholarly enquiry is likely to be qualitatively different from one driven by journalistic enquiry, it has the potential to be unexpected to developers used to fielding the same narrow range of enquiries, and thus may result in a more spontaneous and revealing response. I believe as long as the potential for self-marketing is anticipated and handled by the method (for instance, by employing an analytical framework from discourse analysis as described above) we need not turn our back on such a useful source of knowledge due to academic hubris or methodological caprice.[57] For instance Caldwell's statement about accepting and handling spin as part of the method might be seen as a direct response to Raz and Cotes concerns.

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[57] Indeed one of my interviewees who had a background in studying classics expressed a similar frustration with academia's reluctance to talk to industry "I mean the thing with classics is you spend all your time sort of focused on these works by people who lived so long ago that you have no access whatever to what they were actually thinking. But in game studies like there are designers who've given interviews you could look at. It's not hard. You can even email them something" [ES17].

The idea that the research interview might not illicit any more unique a response from the participant than an interview for the press as suggested by Cote and Raz (2015, p. 105), might temper the validity of the approach of interviewing industry professionals for some, but as Caldwell emphasises, what is being said is not nearly as important as *what it tells us about* the discourses and narratives that circulate within industry. He states:

> My project is also less about finding an ''authentic'' reality ''behind the scenes''—an empirical notion that tends to be naive about the ways that media industry realities are always constructed—than it is about studying the industry's own self-representation, self-critique, and self-reflection. (Caldwell, 2008a, p. 5)

To put it another way, the object here is not to get at a positivist truth, but at what the social actors themselves might discursively imagine to be that truth. The issue of truth claims in qualitative work is a thorny topic that needs to be unpacked more thoroughly. As Morley states, qualitative methods are about our ability to "understand how social actors themselves define and understand their own communication practices" and to see how these ideas operate in the context of their own social reality in terms of how, "their decisions, their choices and the consequences of both for their daily lives and their subsequent actions" (Morley, 1992, p. 175). But if such discourses are inevitably always fictions (we are telling stories of stories) they are fictions in the older use of the term, that is according to Geertz something 'fashioned' or 'made' rather than necessarily something always untrue (Geertz, 1975b, p. 15), and it is precisely that which is made by humans that is the subject of interest to anthropology. As Caldwell argues, such fictions are precisely made up to facilitate a deeper understanding of their role, and so they are true to their phenomenological experience even if they may not be true in a fundamental sense. Truth is not relative in the sense that anything goes (a common misunderstanding of ANT by its critics who characterise Latour as a 'post truth'

philosopher (Kofman, 2018), but relational in the sense that it is held in a network of other statements.

ANT is robust enough as a framework to deal with the concept of truth precisely because nothing stands alone but is always seen as part of a relational network. Thus, a fundamental tenant of ANT is that things can simultaneously be both real and constructed without contradiction. The 'truth' of a thing, or its reality, to a large extent depends upon the discourses around it (for instance, on how many people take that construction to be true). By the same token, statements cannot be considered truths or fictions on their own (they are not *sui generis*), but this depends upon the processes to which they are put to in future utterances in a social context:

> A sentence may be made more of a fact or more of an artefact depending on how it is inserted into other sentences. By itself a given sentence is neither a fact or fiction; it is made so by others, later on… As a consequence, listeners make sentences less of a fact if they take them back where they came from, to the mouths and hands of whoever made them, or more of a fact if they use it to reach another, more uncertain goal. The difference is as great as going up or down a river. (Latour, 1988, p. 25)

There's a paradox in my activities then, because by attempting to bring games texts back to the moment of their production in the studio before they are sealed as black boxes (back to the "the mouths and hands of whoever made them"), I am trying to make them less of a fact and more open to interpretation; but conversely, by then placing them into a framework of industry theorising and publishing them in a thesis, I am inevitably contributing to them becoming more of a fact, just as the scientific facts that are the object of Latour's study are gradually stabilised as they are drawn upon more frequently in a citational network of references and experiments. A story becomes truer each time it is repeated. But paradoxes are useful in a mixed method approach in so much as they place

things in a balanced tension. So just as I attempt to read the text back into the production context, and attempt to read the production context into the text (going both ways down the river, according to Latour's sentiment), by taking the fact back to the studio context it is made into more of an artefact and this mitigates against it being reified as a fact as I bring it into my argument.

With all this in mind, the question protocol I created (Appendix F) developed a set of general points of enquiry that were then tailored to each individual interviewee and adapted on the fly to respond to a specifically productive line of enquiry. Such an ad hoc approach is appropriate to a semi-structured format designed to encourage designers to talk about their specific interests by speaking directly to the themes and concerns of their work (indeed, this is an approach my experience as a game journalist aided me in). Such a flexible approach keeps open the potentiality for "being surprised, of reaching knowledge not prefigured in one's starting paradigm" (Willis, 1980, p. 178).

The best justification for flexibility in positing questions to developers can be seen in the differing approaches they had to answering them depending on their role; with narrative designers typically responding using narrative examples, whilst level designers used examples from gameplay or the spatial structure of game environments.[58] The questions were not rigidly followed as a script but rather utilised as a resource. Follow up questions were asked based on the responses given. Therefore, the questions included in Appendix F should be considered partial and purely illustrative. Questions were also altered from interview to interview as the approach to the topic was refined, as is appropriate to an iterative method. I however asked all participants the same final question about what they felt the key driving causes for changes to narrative was in the industry, and the responses I gained provide much of the discussion of changing cultures of production and consumption that throughout this thesis. Ultimately the interview process helps to close the gap between my own

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[58] Responses from Dion Lay (Narrative Designer and Catherine Woolley (level designer), both at the company Creative Assembly, particularly demonstrate this, illustrating both the vastly different view of the production process different disciplines have but also their own interests and priorities.

interests and biases as a researcher and those of the developer as an expert on the topic at hand. It

is important to let interviewees speak about these interests, even if they seem to stray from your

own agenda, because they may end up revealing something unexpected. Once again this is as much

to say that we should not only follow the actors (Latour, 2005, p. 227), but should take what they say

seriously, even as we treat it in a critical framework.

I created a shortlist of 45 likely interview candidates (Appendix A) informed both by my own

knowledge of the field (my background as a games journalist once again helped here), but also by a

study of articles between 2010-2015 on the major game journalism outlets Eurogamer and Polygon.

These sites were chosen for being relatively highbrow and interested in deep reflections on the

nature of games as a medium, rather than merely covering new releases and superficial trends as is

common for review-based sites like Gamespot and IGN.[59] This (incomplete) research was originally

carried out as part of a reception study, which was intended to be part of the thesis. As my focus

honed in on the production context I realised that such a dual enquiry was beyond the scope of my

current project, but although the chapter was ultimately dropped the research informing it was

useful in pointing out some of the titles frequently discussed in gamer discourse as interesting or

provocative.

This is an example of what Auerbach and Silverstein call theoretical sampling "which entails choosing

research participants who have information related to your research concerns" which is driven by

"theory, rather than the requirement of randomness" (2003, pp. 18–19). This purposive and

targeted approach is important for the following reasons. Firstly, given the complexity of games as

multi-modal expressive objects created by large and multidisciplinary teams, a focal point was

essential in order to narrow the scope of the project and narrative was chosen to serve this purpose

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[59] Although these sites are somewhat more specialised and thus superficially less mass market and more
directed at niche audiences, they are still both very high profile with large subscriber bases. Indeed, Eurogamer
runs the major UK public games expo EGX held each year at the Birmingham NEC, as well as a smaller event
called Rezzed at Tobacco Dock.

given its central and growing role in game production. Secondly, for a project that takes a synchronic look at the games industry at our contemporary moment (considering the tensions and interrelationships between AAA and indie development, for instance), having a similar role under analysis in each studio results in a fixed constant that allows me to consider the interaction and movement of other variables in relation to it. Finally, as an exploration of industry theorising that understands the industry as a network of mediators who form, modify and relay ideas, it recognises that some mediators are prioritised as more important both by the fan base and the industry itself – narrative designers and project leads fulfil this role in public discourse as such figures are regularly associated as the auteurs of such works by the gaming press and larger fandoms (and are regularly interviewed by them).

After identifying the appropriate point of contact for each developer,[60] I sent letters to each address, following up later via email or social media contacts when necessary. I chose physical media as my first point of contact not only because it appeared more professional but because I felt it would be more impactful to developers who already received hundreds of emails and tweets a day. I interviewed a total of fourteen participants, but only used twelve of these (the same amount of interviews used by Juul in his work *A Casual Revolution*). A thirteenth interview with Simon Flesser of Simogo Games, was discarded because it was conducted by text chat rather than VOIP and I felt it was ultimately too much at variance with the way the other interviews had been conducted – for instance, in such an asynchronous text interview there is more time to create a considered response, meaning I was no longer getting a spontaneous reaction. For similar reasons I turned down the opportunity to conduct interviews with several other respondents who were only prepared to answer questions via email. Another interview with Tom Rawlings of Auroch games was unused

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[60] For independent developers this was normally easily identifiable, and addresses were readily available, especially as this was before the mass harassment that was a major component of gamergate led developers to be more cagey with contact information. For AAA developers the first port of call was usually the public relations department, for which I used my old contacts as a former games journalist and my access to the press resource gamespress.com.

because I felt the output of their studio, mostly digital versions of board games, didn't align with the comparative focus I was starting to develop on indie and AAA.[61] I stopped interviewing at the point of theoretical saturation in which "interview data [is] no longer producing new thematic patterns" (Galletta, 2013, p. 33). Although this is a somewhat subjective judgement call, I had to face the fact that my research was also limited by material constraints of time and energy. Ultimately, I feel relatively confident that saturation had been reached because, even though they were ultimately unused, the Flesser and Rawlings interviews were gesturing towards many of the same themes that were formally coded in the rest of my corpus.

It would have been preferable to conduct more interviews with AAA developers, but such developers are very hard to recruit because they are often bound by non-disclosure agreements and carefully managed by PR departments, and as O'Donnell notes, such arrangements "encourages the fallback position that everything is secret" (2014, p. 147). Sherry Ortner has noted a similar difficulty in accessing key individuals on large scale Hollywood productions as opposed to easier to access indies (2013, p. 3), something that certainly resonated with my experience in approaching the games industry, which for the last two decades has been formalising from relatively informal, cool up start to a rigidly controlled enterprise more in line with the film industry (Keogh, 2019a). Even if it is not done out of suspicion of academic intervention, Ortner has argued that gatekeeping access to the sites of media production by public relations departments may be down to "pragmatic interest" since in most cases PR departments are searching for "journalists from major media who will give their programs important publicity" (Ortner, 2010, pp. 217–218) and compared to that academics (especially early career researchers) have little cultural clout or bargaining power.[62] I was relatively lucky with the AAA recruits I did get. Rhianna Pratchett is a well-known freelance writer, and that

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[61] Although it must be noted that I included Emily Short, an interactive fiction author, because her extreme interest in procedural narrative spoke uniquely to the themes of my study and because I felt the inclusion of an outlier might raise interesting insights as well as help avoid fundamentalist definitions of games.
[62] Indeed I rather doubt I would have been as successful as I had in recruitment without my experience as a games journalist that had given me some links to the industry and helped build rapport with my interviewees.

relatively unbounded status, as well as her reputation as an outspoken industry commentator, gave

her a tremendous openness. Secondly the two participants I interviewed at Creative Assembly (a

developer owned by the giant publisher Sega) Dion Lay (Narrative developer) and Catherine Woolley

(level designer) gave me two very valuable perspectives on the some production.

Interviewing an above and below the line[63] employee from the same studios is not only also useful in

order to mitigate against the kinds of spin that should be guarded against in industry interviews –

enacting a form of triangulation by checking an idea from one interviewee tracks with another – but

also helps balance the weakness of each role with regards to information access and transmission.

Because above-the-line roles like creative leads, so the logic goes, are higher up in the hierarchy (and

because their jobs tend to be preserved from project to project) they potentially know more about

high-level studio strategies or the decision-making processes around a given project, but are also

thought to be more defensive of that knowledge because they are more loyal to the company and

more heavily media trained to internalise the company's official line and to know how to articulate

it. Meanwhile, below-the-line workers, being more nomadic given the tendency for contracts to be

organised around specific projects, are thought to be less loyal to the studio and less media trained,

potentially making them more loquacious, however they consequently have access to less

information. Elsewhere in an essay on accessing practitioners, for instance, Ortner notes that below-

the-line workers, those in more mundane craft roles, are far easier to access tha above-the-line

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[63] It must be noted that these terms are being used somewhat flexibly here to explore a relatively similar phenomena. Although the games industry has fundamentally different kinds of workers to the film industry, I define level designers as below-the-line because they perform similar skill based tasks that ultimately result in implementing the creative vision into the game on a practical level without having much influence over that vision. Secondly, and perhaps more importantly, such a line does not strictly exist in the game industry because it is based on the differing regimes of renumeration of the powerful guilds and unions of the American screen industry. As Miranda Banks explains: "the distinction is derived from a particular workers position in relation to a bold horizontal line on a standard production budget sheet between creative and technical costs, establishing a hierarchy that stratifies levels of creative and craft labour" (Banks, 2009, p. 89). However, as of yet the games industry (much like the software industry from which it was partly birthed) has no universally recognised union, and therefore no line as such. The analogy, however, is still useful and the ways it is now used means that it speaks more to a general distinction between craft and creativity than as strictly referring to the original context.

professionals (Directors, screenwriters, producers and the like), concluding that a "scholar is more likely to get 'inside' if that inside is, as with so much classic anthropological work, among the less powerful" (2010, p. 213).

Snowball sampling (Auerbach and Silverstein, 2003, p. 18) was also used to extend the sample of interview subjects and involved asking each interviewee if they knew of anyone who might have an interesting opinion on narrative.[64] Such an approach also helped in terms of access to a professional creative community, which Sherry Ortner has acknowledged can be hard for a researcher to reach (2010). Sampling was also based on convenience in the sense that I interviewed those developers who responded to my invitation. Although this might suggest a bias towards self-selection in the sense that developers with a direct interest in the topic were those most likely to respond, since it was precisely those with a such an interest that I wanted to reach this can be seen as a strength of the corpus rather than a weakness. As Auerbach and Silverstein observe "grounded theory research does not think that random sampling is realistically possible, and approaches generalizability in terms of developing hypotheses, not testing them" (2003, p. 17). Theoretical, snowball and convenience sampling are appropriate approaches in my study – over more potentially objective processes like random sampling common in social sciences and psychology – not only because such neutrality is impossible to achieve, but because I am not testing a general population but a highly specialist one.

Indeed, it is because I was drawing on a series of elite interviews that I chose not to use a pseudonym to disguise the respondent's identity as is common in sociological research. Traditions of guaranteeing anonymity has understandably grown out of social science research that works with vulnerable or marginalised groups or with controversial topics, where research participants may

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[64] Sean Vanaman, for instance, led me to Steve Gaynor and Tom Rawlings to Rhianna Pratchett using this approach.

need to be protected from the unwelcome attention that might be attracted by the publication of such research in the public domain. Since most interview methodology books are written in this tradition (see some of the examples put forward by Galletta, 2013) there is a tendency to adopt such an approach unquestioningly in less sensitive work that, I believe, would benefit from naming its research participants. Whilst research in the social sciences tends towards interviewing groups defined by the specific quality that is subject to enquiry (ie: victims of domestic abuse or users of rehab facilities), research such as mine is concerned with highly creative practitioners with a clear personal brand that is, in most cases, already highly cultivated and deeply embedded in the public sphere (Weststar, 2015). Indeed, I would argue that the reputations of the developers I draw on here are so substantial within their field that it would be incredibly difficult, if not impossible, to discuss the specific projects they worked on without blowing their cover. For instance, whilst explaining that user X attended a drug rehab clinic in London for 3 years is unlikely to give away enough information for the interviewee to be identified, discussing the sole writer within a small studio like Fulbright or Campo Santo, would immediately identify the figure already associated with that studio in the wider public sphere. Further, these games are often so unique in their construction that even if the names of the games themselves were similarly disguised, a basic description of them would quickly (and literally) give the game away. In short, it is no secret that these developers are associated with their works, indeed they increasingly live in public view of the gaming press who they depend on to build rapport with the larger community of gamers, who are in turn increasingly interested in hearing who has made their favourite games. In addition, as will be considered in chapter 3, indie games especially emphasise novelty of form and a personal approach to storytelling that is often inextricably bound up in the creator's identity. Providing automatic anonymity would therefore not only be ineffective, but risks undermining the authority of my own argument by obscuring the reputations of the sources used. Furthermore since game studies scholars like Jesper Juul (2012) and Brendan Keogh (2019a) name their interviewees and their studios I follow a precedent that is already established in my field.

This is not to say that ethics are of no consideration whatsoever (indeed this project was cleared by the UEA ethics board) and I was careful to give each participant the option of anonymity or the ability to view and approve the transcript of the interview afterwards – though none took me up on the offer (which I took to demonstrate their comfort with the arrangement due to their familiarity with being in the public eye. In some regards, to them this was likely just another interview). Issues of anonymity are of more concern for below the line workers at big studios, who don't possess the public persona or social media presence of well-known indie developers, and only one of my interviewees fell into this category. It is also of more concern to female developers, who are underrepresented in the industry and often experience workplace harassment (IGDA, 2020), a phenomena which has exponentially increased due to Gamergate, an event that emerged since I embarked on this process and is centred on organised harassment of female developers by conservative gamers (Kuchera, 2014; Massanari, 2017; O'Meara, 2012; Quinn, 2017). My own corpus included 3 female developers out of 12, a low number but one that it is unfortunately in line with their representation in the industry at large, which currently stands at an estimated 22% (Weststar et al., 2016). On deeper reflection I concluded that little of what the developers had told me was controversial enough to consider hiding their identity, or in the case of Rhianna Pratchett (who had talked about the scandal surrounding the controversial 'crossroads' trailer for *Tomb Raider* discussed in chapter 3), was nothing that she hadn't already spoken about publicly elsewhere.

Ethical considerations also extend beyond the nature of the interview itself as methodological tool at the point of data capture and into the act of reporting the data after the fact. Although ethics procedures almost exclusively frame the early part of the research leading up to the interview as the core event of knowledge formation to be scrutinised – for instance by emphasising the approval of questions and the general approach to sampling – Brett Mills (2008) argues that it is after the interview that becomes the key methodological moment. This is because it is after the interview,

when the researcher is relatively free to use the huge corpus of material gathered and frame it within a critical argument, that the power is truly tipped in the researcher's favour (Mills, 2008, p. 149). In short, it is precisely the moment in which the limits of the ethics agreement are surpassed that the researcher's own personal and professional ethics must most come into play most strongly. For Mills this comes down to a difficulty in reconciling a moral responsibility to avoid "criticizing a group of professionals who kindly gave their time for a project they did not fully understand" (IBID, p. 151), with a scholarly necessity to criticise mass media that is expected of academic writing. Contra to the tendencies in cultural studies and reception methodologies to appreciate audiences as collections of nuanced individuals, rather than the generic groups into which they were traditionally aggregated under notions of mass consumption,[65] the academy typically extends no such consideration to media producers "because it is assumed they are all pretty much the same" (IBID, p. 150). A problem that boils down to the historic lack of interest in television comedy, the object of Mills' study, which is typically dismissed as "only entertainment" (IBID), something that is equally if not even more true of the videogame studies which lack the intellectual cache that even television studies has managed to win for itself in the halls of major universities.

Methods books highlight the impower balance between researchers and research participants in interview led research and highlight the need for sensitivity to these imbalances and the effects they might have on the research (Creswell and Poth, 2017, p. 98). As Mills points out such concerns are generally more pressing for "interviews with ordinary people who are not being defined for the research by their job" (Mills, 2008, p. 150), the relationship with media practitioners is a special case, because as Sherry Ortner (2009) argues academics, as members of the knowledge class, might have more in common with their interviewees than not, leading her to suggest instead of thinking of what

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[65] Most obviously this homogenisation of the audience can be traced back to the famous 'hypodermic needle' model of reception established by members of the Frankfurt School like Theodore Adorno (2001), in which mass audiences were seen to be passively implanted with messages by the propogandist and monolithic infrastructure of the mass media. It was such a hierarchical model that cultural theorist Stuart Hall's (2007) famous essay 'Encoding, Decoding' sought to dethrone.

we do as 'studying up' or 'studying down' the social hierarchy, we are in fact often 'studying sideways.' Studying sideways suggests a closer parity of education and life experience between social science researchers and media workers, many of whom are themselves university educated and are "working in the same general cultural zone as ourselves – the world of knowledge, information, representation, interpretation, and criticism" (Ortner, 2009, p. 223). Such a model not only involves the recognition of a potential shared background and taste culture, but it also ties into the central conceit of industrial theorising: that both industry and academia produce theories about the medium. All of which can greatly help establish rapport with the research subject.

This is true even of the games industry. Indeed, it is salient to note how many game developers have a background in literary studies and other media-based humanities courses.[66] For me, the potential for rapport that results from a shared culture is enhanced by my own background in the games industry. Although I have never worked in core areas of production such as the arts and programming departments O'Donnell explores in his work, my encounters with the industry from its periphery as a game journalist and quality assurance tester give me a more detailed understanding of the relations between the industry itself and the larger conditions of reception, in which the extensive game journalism sphere has traditionally been a key player. Clearly there are advantages for the interview to this kind of "complicity" (Ortner, 2009, p. 224) and "shared habitus" (IBID, p. 225), though Ortner also draws on bitter experience to illustrate the potential risks in that such a relationship, because whilst it places you often in a position of camaraderie, it can also just as easily place you in a position of competitive one-up-man-ship (something which I thankfully did not experience).

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[66] Greg Kasavin, for instance, spoke to me about sharing a background as English majors, which allowed them to utilise a deep appreciation of the novels of Cormac McCarthy as a shared reference point for their work [GK18].

OVERVIEW OF CODING PROCESS

Following the interviews data was transcribed and coded using thematic analysis, an inductive approach in which the codes emerged from the interview data itself not the "researcher's analytic preconceptions" (Braun and Clarke, 2006, p. 83). This is in line with the uncertainty the ANT researcher should initially adopt in an attempt to approach the topic – described as a kind of agnosticism. As argued by Virginia Braun and Victoria Clarke a thematic analysis is capable of being, "a 'contextualist' method, sitting between the two poles of essentialism and constructionism… which acknowledge the ways individuals make meaning of their experience, and, in turn, the ways the broader social context impinges on those meanings, while retaining focus on the material and other limits of 'reality'" (Braun and Clarke, 2006, p. 81). In short it fits neatly with an ANT account of reality, which similarly offers a middle path between social construction and material reality – the relational qualities of ANT are neither realist nor relativist.

The process in its entirety is far too complex to follow in detail, but the appendices that follow the PhD will show the data at crucial moments, including a complete list of repeated ideas organised into the final array of themes and theoretical constructs in Appendix C. The citations here are differentiated from the Harvard referenced citations of the rest of the text through the use of square brackets, and so the appendix serves as a reference for the full version of each coded segment so that shorted quotations can be seen in more context. Such appendices are also important for the data analysis to be considered 'transparent', meaning that "other researchers can know the steps by which you arrived at your interpretation" and 'coherent' in that "theoretical constructs must fit together and allow you to tell a coherent story" (Auerbach and Silverstein, 2003, pp. 84–85). Even if a researcher's interpretation of the data ends up being only one supported interpretation among many, it is important to leverage evidence derived from the interview corpus to back up claims. The practical application of my method follows the outline laid out by Carl Auerbach and Louise B. Silverstein (2003) in their book *Qualitative Data: An Introduction to Coding and Analyzing*, which has

already ben discussed above in light of debates about the value of qualitative methods. Because a

research corpus is difficult to take in at a glance the method of thematic and then theoretical coding

allows researchers to deal with the complexity by sorting and refining the data by "discovering

patterns within that organizational structure" (Auerbach and Silverstein, 2003, p. 31). There are

three stages to this process 'making the text manageable', where "you work at the level of the text

itself" and enact a "filtering process, in which you choose which parts of your text you will include in

your analysis, and which parts you will discard" ; 'hearing what was said' where you work "at the

level of the subjective experience of the research participants" and sort their experiences into

repeating ideas and then more general themes; and finally 'developing theory' where "you work at a

more abstract level to group the themes into more general concepts" (Auerbach and Silverstein,

2003, pp. 42–43). In practical terms this involved, at each stage, reading methodically over the data

and transferring key points to a new file[67] – first to select the relevant text from the raw data set,

then to capture the repeating ideas from the relevant text, then to refine the repeating ideas into

themes, then to organise the themes into theoretical constructs, and finally to weave these into a

theoretical narrative that speak to the research concerns.

Such a process that goes from raw text to final theoretical narrative operates in a manner rather like

computer languages – where machine code (expressed in the binary language of 1s and 0s) is the

native language of the computer, but very hard to parse for humans and gives way to increasingly

abstracted higher-level computer languages (visual basic, python, C+) that act as interfaces and

allow the programmer to work, albeit in a less direct manner. A certain degree of abstraction and

reduction is therefore as essential in coding data in an academic project as it is in coding a piece of

software. Although this chain suggests a progressive and linear view of the process, because the

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[67] Although I experimented with NVivo as a specialist software programme for coding data in order to help automate the process, I ultimately found this unwieldy and counterintuitive. I ended up following Auerbach and Silverstein's good advice that a researcher's first project should be coded manually to help gain a deeper appreciation of the process.

method is iterative and recursive the researcher actually constantly oscillates between various stages of the structure (after all, organised rigor does not necessarily mean rigidity). Organising repeating ideas into themes not only helps move to the next level of organising the themes into theoretical constructs, but might prompt a return to the earlier stage in order to refine or rearrange repeating ideas[68] or even to reinclude some text that had already been discarded. For Auerbach and Silverstein this does not mean you are correcting mistakes, so much as you are becoming more familiar with the material and "are learning about your participants' subjective experience in a more nuanced way" (2003, p. 55).

Once the data has been organised into themes[69] – a theme being an "implicit topic that organizes a group of repeating ideas" (Auerbach and Silverstein, 2003, p. 38) – a theoretical construct is developed that organises several themes together into a useful conceptual framework (Auerbach and Silverstein, 2003, p. 67). The theoretical constructs were organised in scale from micro to macro, beginning with specific discussions of the production environment the game is created in, to a discussion of constraints and influences on the development process, to specific discussions of how narrative and gameplay are conceived of within these processes, further out to the domain of reception where the player experience is sought to be understood, and finally an attempt to understand larger cultural shifts. Industry theorising happens at all these levels, but it is most prominent in the later stages in which developers seek to understand the shifting cultures of consumption into which their games will be released. At this point any themes that do not seem to fit ("orphans") are reconsidered, their relevant text either merged with other themes or are discarded from the study. For instance, I decided against using a whole section I had constructed

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[68] For instance although describing the phenomena precisely the code 'reductively authored constraints' I started with was too jargon laden, and by working through the data I was able to select an in vivo term from Dan Pinchbeck's interview, changing it to 'fitting player to story' which also provided a more nuanced description.

[69] For me this involved a reduction of around 100 repeating ideas into 23 themes, a reduction by a factor of 4 which is what Auerbach and Silverstein recommend.

called 'industry theorising' (including overt statements of good and bad design, and reflection on

links between academia and industry), because although these including good specific instances of

industrial theorising (many of which were rolled back into other categories) I was increasingly

starting to think of my entire corpus as a variety of different versions of industrial theorising, making

a specific section on it somewhat redundant.

The final phase of coding involves linking the final themes to these theoretical concepts and then

providing a theoretical narrative of the key findings in that context. This is an important stage to link

my interpretation of the data to key trends and discourses in game studies. Auerbach and Silverstein

suggest a combination of constructing your own theories or using pre-existing ideas. For my

purposes, I will attempt where possible to link ideas directly to pre-existing theoretical concepts,

primarily from game studies or adjacent disciplines.[70] Once again this is not a return to a top down

approach to the data because the themes have already emerged in a bottom up manner. It is

important to tether them to theoretical concepts at this point to ground them into larger conceptual

concerns relevant to my study as well as to illustrate the way industrial theorising interfaces with

larger academic theorising (albeit with each using very different terms).

Since such a framework must help draw out something from the interview data and link it to the

world of concepts, these constructs do not "simply redescribe" but rather help to "organise people's

subjective experience into a coherent story" (Auerbach and Silverstein, 2003, p. 73). Consequently it

is important to "[employ] people's own language to make their story vivid and real" (Auerbach and

Silverstein, 2003, p. 73). Clearly a subconscious agenda is at play in the sorting mechanism, but this is

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[70] For instance, although Donald Norman is considered to belong in the fields of industrial design and Human Computer Interaction, these can be considered adjacent fields to game studies because his work, particularly 'The Design of Everyday Things' and 'Emotional Design', are regularly cited by game studies scholars and taught on game design courses.

mitigated by the grounded method; by keeping the focus on what is said. In anthropological terms this process is close to Clifford Geertz's notion of thick description.

There are two potential flaws to the manner in which I conducted my research which I wish to discuss here. The first is in terms of methodological rigor. In order to avoid over subjectivity Auerbach and Silverstein assert that "qualitative research coding is done by multiple coders" (2003, p. 47). Because there was not the scope to take this particular approach in my research, I hope the reader will be satisfied by the inclusion of the repeating ideas in Appendix B so that the process can be repeated up to a point and my own interpretation verified (or at least accepted). I will also note that the data was coded twice, once just after collection, which facilitated much of the drafting of the PhD, and the second time much later on. The rationale for this was that my own interpretive frame had changed (I had by then become thoroughly enmeshed in actor-network theory as a framework) and, as is fitting for an iterative method, I wanted to return to the earlier phases of the process to ensure I had not missed anything in light of these new concerns. I also wonder whether returning fresh to the raw data after such a gap might not count as something approaching a second coding as recommended by Auerbach and Silverstein – especially if we adapt the old saying that "the same researcher never steps into the same data stream twice".

The second flaw is concerned with ethics and fair representation of the research participants. Auerbach and Silverstein recommend the researcher "check [their] work with a consultant" which is also something I did not have the capacity to do. They go on to say "this should be a member of the culture you are studying who is not involved in the research project" (Auerbach and Silverstein, 2003, pp. 65–66), something which I feel would have been infeasible in the current terms of my project and my influence and resources as an early career researcher. This is because it was challenging enough to make contact with the designers I did manage to interview, let alone recruit

others just for the process of consultancy,[71] and secondly because Auerbach and Silverstein are typically dealing with marginalised communities (those from non-standard sexualities or religious groups) that made cultural sensitivity a far greater concern than here. Whilst it might be theoretically interesting to consider designers a marginalised group in mainstream game development, this is an entirely different circumstance. Besides which my research was approved by the university's ethics committee and consent forms signed by all participants. Here I gave each participant the option of seeing and signing off on their interview transcripts.

PART 2: METHODOLOGY IN ACTION: COLLABORATIVELY MANAGING IDEAS THROUGH A DYNAMIC PRODUCTION ENVIRONMENT

ANT has been extended from its origins in science and technology studies to a wide variety of structural phenomena from democracy (Callon et al., 2009) to medicine (Strathern, 1999), and I extend it here to the notion of the creative studio. I hasten to add that I am not the first to do this, rather I follow in very fresh footsteps Ignacio Farías and Alex Wilkie (2015), whose edited collection 'Studio Studies: Operations, Topologies & Displacements' opens a new front in the application of ANT to the wider sites of cultural production. This work situates the studio as an analogue to the laboratory, which helps us to situates the more abstract analysis of the cultural industries in chapter 2, in which the vagueness of working through the tensions of creativity within the constraints and affordances of a real set of spatial relations, are grounded in the model of the studio.

Clearly such an assertion requires us to see similarities between the laboratory, which is the focus of many of Latour's enquiries, and the game studio, which is the object of my investigation. Key to this

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[71] Besides which game designers are often incredibly busy people, and while it might be reasonable to ask them to carve out an hour from their evening for an interview (a generally engaging and enjoyable process, which they might even see as part of their job description given it is interviews with journalists that largely sees them being exposed to a wider audience), it is another matter entirely to ask them to spend hours trawling through research data and theoretical frameworks.

is the question of what is meant by the word 'studio' in the term 'game development studio,' which

provides the key unit of analysis in this study. Farías and Wilkie's work analyses a wide variety of

workshops, factories, artist studios and even a game developer, in order to stress the heterogenous

nature of the studio as a structuring concept. In light of this diversity, in his own chapter Farías

proposes a process based definition of the studio that moves beyond the model of the studio as

coherent geographical space to a more flexible model that applies to a wide variety of sites both

indoors and out (Farías, 2015, pp. 197–198). Consequently, this is my understanding of a studio

going forward:

> Accordingly, the studio needs then to be conceived as a space created for and through the
>
> operation of manipulating both objects and environmental conditions. Etymologically the
>
> term studio refers not primarily to a type of place, but to the activity of studying or
>
> inquiring… via a targeted attempt at arranging, maintaining and transforming the socio-
>
> technical and atmospheric factors influencing material processes of inquiry (Farías and
>
> Wilkie, 2015, pp. 201–202)

Indeed, Latour doesn't use the word laboratory in a strict sense as pertaining solely to a scientific

institution, but any highly specialised site that collects together expensive apparatus into arrays to

create new objects through manipulation of knowledge. In this sense the game studio is a prime

laboratory, since its output is not solely the game text but a number of proprietary systems and tools

that can be reused or licensed to other studios/laboratories (the studios Naughty Dog and Quantic

Dream, for instance, are famed for their pioneering interventions into motion capture

technologies).[72] While the object of a scientific laboratory is to stabilise artefacts into facts through a

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[72] In chapter 2, through a case study of Tomb Raider, I show how even the audience itself is constructed in the
studio's QA department.

series of modulations, the product of a game studio is a mixture of product, IP and technological infrastructure.

I began most interviews by asking the participant to describe the arrangement of their studios and how they perceived their own role in the processes therein. I found this important ground clearing process that helped the interviewee focus their attention down to thinking about creativity in material circuits of production. Although it pertains to all stages of the process described here, this level of the analysis is particularly well suited to actor-network theory as a descriptive mechanism that can elucidate the complex networks of exchange both specific to the studio and its internal production culture, and as it interfaces with broader networks.

By considering the game text at the point of its production, within the studio where it is under formation and before it is sealed as a black box, we can restore and reconstruct some of the complexities of its formation. According to Latour things only leave social traces that allow them to be studied if they are actively under formation or become controversial. If something is taken for granted it slips into the background and becomes silent. Studying objects as they are under formation (in laboratory conditions) is one way to make these mute objects speak, as is observing points at which they break (Latour, 2005, p. 81). As Bruno Latour illustrates with an example from anthropology:

> Occasionally, when an anthropologist is lucky enough to witness the disintegration of a tribe and the subsequent creation of a new settlement, he can catch a glimpse of those rules of behaviour that remain hidden during periods of normal activity. (Latour and Woolgar, 1986: 223)

What follows here in the second part of this chapter is a summary of some of these theoretical narratives, which is to say my interpretation of the interview data. This serves several purposes. Firstly it introduces the reader to my research participants and their general concerns, secondly it overviews the research data and illustrates the main concerns laying a groundwork for the rest of the thesis, and thirdly it acts as a good way to introduce many fundamental concepts about how the games industry or the individual studio is structured, which will be explored in more depth in the following chapters.

TRAJECTORIES AND PRODUCTION ENVIRONMENTS

In a discussion of science as being progressed through a series of social and cultural networks Latour develops the notion of the career trajectory to explain how individual practitioners align to and break away from projects, taking up "a number of successively occupied positions" (Latour and Woolgar, 1986, p. 214) to which they contribute their experience, values and insights. As Latour asserts

> a group can be thought of as the result of the intertwining of several trajectories. Group organisation can thus be interpreted in terms of the accumulated moves and investments of its members. The conjunction of participants' trajectories make up a hierarchy of administrative positions. (Latour and Woolgar, 1986, p. 216).

Once the various trajectories temporarily stabilise into the unique assemblage that is the studio they form a production environment which, although sharing broadly similar characteristics to other studios of the same scale, provides a more or less unique creative culture based on the particular mix of individuals, experiences and technologies. Although a game studio might bear the same name and branding for decades, artificially suggesting a continuity of vision via branding and the legal framework of corporate law, its trajectories (and therefore its creative culture) will be changing all

the time, more slowly during a specific game project (typically a 2-4 year cycle) where the emphasis

is on maintaining a workforce, but very rapidly in between projects where the tendency is to shed

workers before recruiting afresh for the next project. [73] The change in culture will be even greater if

certain key members of staff who have acted as creative visionaries depart.[74]

Because such cultures are unique the onus is very much on the researcher to elucidate this structure

before firm claims can be made about the flow of ideas and structures that constitute a given game.

There should be no short cuts for the scholar in proclaiming that one sector of the industry

absolutely fits a certain model (though anecdotal accounts of this nature of course abound), rather

these claims should be built from an analysis of real production environments, and because they

cannot ever take in the whole landscape of indie or casual or AAA games (let alone the landscape of

the industry at large) they can only ever be as temporary and partial as the studio structures they

describe. This should not mean that such work is not important. After all, even the scientific method

contains within it a sense of provisionality that is always open to modification if better techniques or

research programmes prevail, but such provisionality does not halt science in its tracks. Though this

makes it harder to extrapolate the findings here to make grand claims about the industry or its

various sectors (such is the hazard of qualitative studies in general) Auerbach and Silverstein note

that there is still an element of the theoretical construct that can extend beyond the subject at hand

to the wider sample that shares characteristics with it.

This is because the construct will include a more abstract dimension and a more concrete dimension.

Whilst the concrete dimension of repeating ideas and themes is tied to the particular culture under

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[73] Indeed, this dynamic is directly expressed in the names of many studios themselves: such as 'Creative Assembly', which gestures towards the notion of an assemblage; 'Crystal Dynamics', which suggests a many faceted complex process; and 'The Chinese Room', a reference to a problem in AI theory that demonstrates how a computer can undertake a range of processes without actually possessing a consciousness.
[74] For example, the departure of the two medical doctors, Ray Muzyka and Greg Zeschuk, who founded the studio *Bioware*, resulted in anger and anxiety from the fanbase and is widely considered to have been the cause of a decline in quality of the studio's output (Crecente, 2013).

question (Auerbach and Silverstein are discussing cultures in terms of ethnic origin here, but I believe there is enough overlap with what I am calling creative cultures), the abstract implications of theoretical constructs are more broadly applicable making it "possible for theory developed within a qualitative design to extend beyond a specific sample and also to be culturally specific" (2003, p. 86). The authors call this quality "transferability", though taking my cue from ANT I prefer "translatability". Once the trajectories are temporarily stabilised within the rubric of the studio, and the particular game project they are linked to, they form a particular production culture which if particularly powerful may become associated with the studio's reputation going forward, a state of affairs which can persist long after that culture erodes.[75]

What I am calling a production environment, which forms a culture of creativity, overlaps somewhat with what Joanne Weststar (2015), drawing on the work of a number of earlier scholars of the workplace, calls 'occupational communities'. Whilst this is more conceptually general and abstract (it speaks to the larger community of game designers and observes traits that unite them), the way I am using production environment is more concrete and specific (it speaks to the specific formation of studio culture, which may be informed by larger occupational communities but cannot be subsumed by it). Boltanski and Chiapello explain the nature of this temporary formation via the notion of the project, which bears striking similarity to the language of ANT and the process driven conception of the studio laid out above:

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[75] A classic example of this can be seen in the origins of console videogames as described in Tristan Donovan's (2010) industrial history of the medium in the formation of Atari, which initially sought to establish a lackadaisical creative culture within the corporate landscape of silicon valley before becoming associated with formalism and rigidity as industry leaders. This led several Atari team members to break away and form arguably the first third party developer Activision – which unlike Atari (who did not list artists or programmers on their cartridges) promised a creatively driven culture where its artists would be credited and aptly rewarded. The fact that Activision, now one of the biggest publishers in the world, is largely associated with stultifying conservatism and lack of imagination within gaming communities aptly demonstrates the rise and fall of such creative cultures.

> The project is precisely a mass of active connections apt to create forms – that is to say, bring objects and subjects into existence – by stabilizing certain connections and making them irreversible. It is thus a temporary pocket of accumulation which, creating value, provides a base for the requirement of extending the network by furthering connections.
>
> (Boltanski and Chiapello, 2007, p. 105)

Chapter 3 will focus more on the specific composition of studios through an analysis of differences between AAA and indie, but here it is enough to say that commercial videogames (typically called AAA games) are made in large studios with large teams. Indeed, the huge growth of such teams can be illustrated by looking at entries in the *Tomb Raider* series. The first *Tomb Raider* game was created by a team of just six people at Core Design, which was at that point still contained in a large converted house (Yin-Poole, 2016),[76] however by Angel of Darkness (2003), the sixth game in the series and the last to be developed by Core, the team had swollen to 84 people and 15 contractors labouring for two and a half years. Eurogamer's in depth investigative feature on the production history of the studio suggests that disfunction crept in as the team expanded, which eventually resulted in the franchise being taken from its creators by publisher Eidos and reallocated to American firm Crystal Dynamics, who had a more developed infrastructure and were more experienced making large scale 3D open worlds (Yin-Poole, 2016). Later still, *Shadow of the Tomb Raider* (2018, the second sequel to Crystal Dynamic's reboot) cost over $100 million dollars with a team of 500 over 3 years (Yin-Poole, 2018). Consequently, large studios not only have huge internal teams, particularly artists and level designers, to deal with the sheer quantity of high resolution textures and open world environments that are becoming the cine-qua-non of the modern videogame, but large numbers of freelancers, outsourcers and multiple studios networked around the world (see footnote 29).

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[76] This is not uncharacteristic of AAA game developers in this era. In 1997 the celebrated game GoldenEye 007 was made by a team of just eight designers.

So how are such production cultures, especially larger ones, made to be productive so that all the pieces are pointing in the same direction? This is usually attributed to the studio's core values (or a project's founding 'pillars'), which are key principles embedded at all levels of the studio to guide its processes. These are often explicitly defined and reflected upon by the founding members, before declining or changing over time especially if personnel come and go or due to changes in the larger context of production (for instance if a larger production house take more direct control over the studio's work flow for reasons of creating efficiencies). It was clear from discussions with creatives that production processes, even in these larger teams, were highly collaborative [CW10, DL3, CG19, RPR4],[77] whether in tight knit sub-groups or within and between specific departments within larger studios like Creative Assembly or Crystal Dynamics. Studios strive to find more natural ways to combine, aesthetics and code, or specifically to marry narrative and gameplay, but also to make the production process more efficient by linking up disparate individuals into a coherent network (for instance, see the discussion of agile methods in the following chapter). Networks become stronger through externally extending their links (by aligning the desires of various allies to its own) and internally thickening its links (by managing ideas through shared documentation and processes). Such allies are actors within the studio and external to it, but on which the studio is dependent.

Since the projects Failbetter work on are so heavily built around narrative they are an interesting case in this regard, because their workforce is predominantly made up of writers producing vast amounts of content. As a consequence, new writers taken into the collaborative network need to be acclimatised to the production culture. Chris Gardiner, the narrative director of the studio, tells me that any inconsistencies are "resolved through conversation" because "as these conversations go on, everyone's understanding of what fits *Fallen London* (2009-) kind of starts to coalesce" as a consequence of which any ideas that are inconsistent with the game are "adjusted in the creative

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[77] Also prevalent were similar terms like 'back and forth' [RP2, CW18, DG16, GK27].

process" [CG13]. The fact that upwards of five people involved in any given piece of content, including Gardiner himself and several layers of quality assurance, leads him to state "so the writer writes, but it's not in vacuum" [CG19].

Contra to this large scale consensus building work, for Greg Kasavin (founder of Supergiant Games) being a small team directly led to more freedom for him as an individual to take the story in challenging directions because "some of the more challenging ideas in narrative in general… are easier to sort of veto" [GK27]. In the case of the studio's second game *Transistor* (2014), for instance, Kasavin was responsible for the writing but within a "back and forth" loop with fellow studio co-founder Amir Rao, the two-person unit making for a very tight cycle of iteration. Meanwhile Ryan Payton uses the improvisational language of Jazz as an example of the loose collaborative culture at his studio Camoflaj, and believes this to be a fundamental value that differentiates them from others:

> Yeah, I mean I think if you look back you can probably say that there was a process but being in the thick of it felt very much like we were playing jazz every day. But when I take a step back, if you look at it versus compared to other teams, I think the way that Camouflaj does its narrative is that the narrative drives pretty much every decision in the game. [RP19]

The metaphor of a jazz band suggests a free-wheeling sense of collaboration that loosely bonds the actors of indie studios in contrast to more rigid processes of AAA, but as strong as the emphasis on collaboration was in my interviews, there was also an underlying sense of conflict that was borne out in many of the discussions, not least due to an underlying rhetoric of agonistic conflict, which acted as a persistent structuring metaphor for the creative process. Whilst he evoked the metaphor of jazz, Payton also describes his working relationship with co-author Brendan Murphy as "fighting and working through really complex and difficult story problems almost on a daily basis for hours and

hours on end" [RP20] and, even after he gets the resulting script back, Payton has to "bloody it up"

[RP21] before it can be implemented. Meanwhile Vanaman's relationship with the software he is

using to manage ideas is almost as conflictual as Payton's meetings: "then I go 'wait a second, I as

the creator of this whole fucking thing, I know that it's possible for Delilah to know...'" [SV17]. When

blockages result in the creative process with colleagues Chris Remo and Jake Rodkin, Vanaman

describes the need to "unspool it back until you find the problem stitch" [SV22].

AAA environments are no less conflictual than indie studio tussles and tangles, with whole

departments staking out terrain. Because people working in different departments have different

priorities, not to mention different views of the production process, Pratchett emphasises that part

of her success as a writer is being aware of the issues "designers will be fighting battles for", not to

mention holding in mind the interests of the end user, "you've got to know how the player is going

to experience the story" [RPR23]. Working in a game development environment includes a great

deal of diplomacy and a careful balancing of the demands and interests of various stakeholders,

including ultimately the absent players themselves. With such a sense of competitive struggle in the

studio in mind, there's an interesting slippage in Lay comment below between 'compromising' and

'cooperating', that suggests fuzzy boundaries between the two:

> When you do a game like Alien you spend a lot of time talking to the mission designers and
>
> compromising on stuff sometimes – not compromising but cooperating. You know
>
> sometimes you want to tell something that isn't that important and it's getting in the way of
>
> game play, so you drop it or you find a better way to do it. [DL10]

Indeed, it may be better to think of collaboration in the videogame industry not via a simple

idealised improvisation (jazz) or an agonistic struggle (either with processes or other departments

with competing interests) but by 'coopetition'. This is a term derived from game theory and applied

to a variety of successful industry players (including Nintendo) by management authors

(Brandenburger and Nalebuff, 1996) and is described in the *Wiley Encyclopedia of Management*

thus:

> Coopetition transcends competition and cooperation, drawing synergies from these
>
> opposing forces. It fosters a win–win scenario in which a firm attempts to increase its
>
> revenue, not through the cannibalization of competitor's market share but through the
>
> creation of larger, more secure markets. (Sammut-Bonnici, 2015) [78]

Such coopetition is a result of the "increasing interdependence of firms in complex markets"

(Sammut-Bonnici, 2015), which as the next chapter attests would certainly apply to the highly

complex games industry, but such structures are also internalised within studio structures

themselves. As I have shown above, the complex dependencies between departments in a game

studio make it a term that could apply just as well apply to the internal structures and processes of

the studio explored here. The result of such coopetition results in the understanding of the firm as

"operat[ing] as a network" (Boltanski and Chiapello, 2007, p. 73), and just as that network extends

externally in larger inter-networked arrangements, they are also increasingly networked internally as

intra-networks. I call these relations and the flow of ideas they enable collaborative poetics and

explore these below using my case study of Creative Assembly, which in many ways is a typical AAA

studio attempting to implement a dynamics of collaboration to refine its processes.

COLLABORATIVE POETICS IN ALIEN ISOLATION

Such an improvisational structure can and does exist in larger teams, though it can be harder to see.

A brief case study of the work behind *Alien: Isolation* (2014) is illustrative at this point as it also

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[78] Where it has significantly already shed its hyphen, a sure indication of its acceptance as a true term and not just a convenient neologism.

demonstrates a small part of the workflow of a AAA videogame production. Dion Lay, the Narrative

director of the game, worked with fellow Creative Assembly employee Will Porter and Dan Abnett

(who was a freelancer drafted into the project) to form the narrative team. An aspect of Lay's role

was to act as a point of mediation between the narrative team and the level designers, who

translated narrative material they had developed and worked it into the spatial design of the game

and its mission structure. Catherine Woolley, my second interviewee at Creative Assembly, was one

such level designer who worked on two key levels of the game (Seegson coms and Quarantine),[79] the

player's first encounter with the Alien and with the 'Working Joe' androids respectively. A specialist

role on most large games, level designers use modular assets created by the art team and basic

layout tools to sculpt the environment of the game and to breakdown the larger narrative into a

series of discrete missions or objectives that unfold within a spatialised structure. Perhaps more

than any other role they see the narrative from its linear written form to a manifestation more

suited to the specificity of the video game form, which makes them key mediators in the process of

creating the kind of ludonarrative convergence suggested in the introduction, by marrying the high-

level storytelling with moment to moment gameplay that would be experienced by the player.

The collaborative relationship between these two developers thus demonstrates how some of the

tensions between narrative and gameplay that have been such a sticking point in academic

discourses are always being worked out (with lesser or greater degrees of success) in material

structures of development. Speaking of the process of creativity in the studio, for instance, Lay

demonstrates how important the intervention of the design team is to the narrative ambitions of the

game, which like Gardiner's comment above clearly does not get written in a vacuum. For instance,

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[79] In increasingly interconnected open worlds traditional means of temporally breaking up the experience like 'levels' are seeming increasingly redundant, however they are retained in the day to day rhetoric of developers as a kind of heuristic for dividing up the workload and the structure of the experience. As the names of Woolley's levels attest this is increasingly used as a spatial, rather than temporal divider, and also as much a way to divide up resources on a large project than to structure experience of the player (indeed Woolley takes pride in commenting that apart from a few moments in the game, most people don't realise they are free to travel around the entire space station in which the game is set [CW25]).

he discusses how the writing team would establish the key "story beats", those events crucial to moving the plot forward (and often requiring cut scenes that have to be planned far in advance), before handing the skeletal plot to the level designers to embellish: "we'd give the level designers the bones of the story and they would know what would be fun" [DL8].

That is not to say that such processes occur in a very planned manner. Indeed, there is something very haphazard and ad hoc about the way gameplay and narrative come together, as though it were happening in spite of all the potential barriers. A good illustration of this is the convoluted way the protagonist and player avatar Amanda Ripley made her way into the game. Although ultimately seen by many to be central to the game's emotional core and narrative logic, the source of the idea was a serendipitous late-night conversation with between Dion Lay and his housemate Chris Gascoign, a coder on the team. As Lay tells it he initially dismissed the idea out of hand "yeah. I just don't think it's going to work Chris" [DL43], but the idea re-emerged when the writing team were trying to find a believable justification for why the player character would be so driven to go to the Sevastapol (the game's space station setting), to collect the black box flight recorder from the Nostromo (the McGuffin that drives the story). Remembering the earlier conversation with Gascoign, Lay realised that the familial ties between the characters would provide the crucial emotional stakes to justify the narrative ("oh my god she's going to find her mum!" [DL43], as well as more strongly link the game to its source material – a factor that reached its zenith when Sigourney Weaver herself was recruited onto the project (and impressively digitised into the game as a digital actress or 'synthespian') to appear in a crucial cutscene in which Amanda finally attains the flight recorder and view's her mother's message.

Narrative ideas seemingly emerge from the network and bounce around until they find some purchase and work their way into design processes proper. We might speculatively call such an arrangement a kind of collaborative poetics of emergence. Emergence being a concept from

complex systems theory which Celia Pearce, drawing on the work of Yaneer Bar-Yam (president of the New England Complex Systems Institute), defines as relating to "how complex, often decentralized systems self-organize in ways that cannot be predicted by their underlying structures or rule sets, nor by the individual behavior of agents within the system" (Pearce et al., 2011, p. 42). Celia Pearce has written about emergence as a key element of MMORPGSs (Massively Multiplayer Online Roleplaying Games, the most famous example being Blizzard's *World of Warcraft* (2004-), that results from the communities of play that surround such games and how they interact with its systems, often creating entirely new gameplay and narrative systems through their play.[80] Whilst Pearce's ethnographic work is directed to the player communities using these virtual worlds, I would argue that such models of emergence can also be seen at play in the context of production cultures and can be clearly seen in the example above, as well as many others in my corpus. Narrative ideas, it would seem, almost never flow from point A to point B in a well-behaved manner, taking the shortest route.

The phenomena can also be understood in ANT terms, a framework that equally understands networks to be built on notions of emergence and recursion that can be traced to complex systems theory and cybernetic theory. Just as Latour argues how scientific facts begin as propositions before being modified through various conversations, documents and connections (Latour and Woolgar 1986: 147), the idea of 'the protagonist as Amanda Ripley' gained increasing traction and legitimacy as it incrementally moved through the nodes of the network: from a casual conversation in a domestic setting, to a meeting between the writing team in the studio, to its manifestation in the script and art assets, to the involvement of Weaver, along with the connections she brought to the project with the original source, retrospectively validating the decision with her involvement. That such a significant part of the game's narrative only emerged as a result of the coincidence of two

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[80] Indeed, several modern game genres have emerged as a direct result of ad hoc games being played within these ludic systems, including MOBAs (Multiplayer Online Battle Arenas), and most recently Battle Royale style games.

team members from different departments living together and having a conversation demonstrates how in large complex teams ideas can flow from all sorts of formal and informal directions and can rarely be attributed fully to one individual. Such emergent processes of idea generation are commonplace in game design and can be partially traced through these kind of ethnographic accounts, showing how they are modified and iterated upon as they move through the network, a process ANT refers to as 'translation'. Examples like this one, "encourages us to try sociologically to understand what is all too frequently transformed into stories about minds having ideas" (Latour and Woolgar, 1986, p. 171).

Despite her apparent below the line role, Woolley's responsibility for these specific parts of the game and her collaboration with Lay allowed her to contribute her own ideas to the story, an example being her development of the NPC (nonplayer character) Dr Kuhlman, one of the few surviving humans who guides you through the medical deck from the office he has barricaded himself into. Although Woolley "can't even remember how I came up with Kuhlman" the fact that she immediately says "I imagine it was working with Dion" [CW5], demonstrates the importance of their relationship within the larger creative system. Such comments also reveal that as a node on a network, level designers are far from passively implementing the creative ambitions of above the line narrative and creative directors, but are highly engaged in a transformative process of working ideas into the game and feeding them back up the chain. In ANT terms they clearly occupy the position of mediators transforming ideas and not mere intermediaries simply passing them on. Lay backs such an image up by constantly acknowledging the collaborative nature of the enterprise and the extent to which ideas flow both ways along the network [DL3, DL10].

Woolley was faced with the challenge of crafting engaging moments of narrative exposition from design documents and generalised briefs for specific missions, whilst drawing on a limited array of assets produced by others; sometimes extrapolating a small amount of narrative into an extensive

sequence of gameplay. It is interesting to note that such moments of interpretation seemingly designed for the player, also function on the level of production. In short, level designers, although they potentially have access to more information, have a level of engagement with the text that is closer to the player than the narrative director, and Woolley constantly gestures to what the player would do to guide her choices[81] in level construction, a characteristic example being:

> So that would enforce us to use loops inside the levels, not so that the player would get lost, but more that if the player was cornered in an area with the alien they would have a means of escaping… they wouldn't think we're treating them fairly as player. [CW42]

Therefore in the final analysis it must be acknowledged that the player (although an abstract rather than concrete player) is constantly present in the act of production, in a manner similar to the implied or ideal reader of reader response theory. For Wolfgang Iser (1978) is the principle architect of this concept, which is an important step away from a passive conception of consumers characteristic of the Frankfurt school of media effects and towards the active consumers – Stuart Hall (2007) uses the term 'decoding' to express this active effort – of meaning at the heart of modern cultural theory. In reader response theory, the reader is not simply absorbing an intended message, but playing along with it; meaning is always created in the act of reading via the interplay between an active reader and an author interacting with them through the literary work (or film, or game). An important part of this fundamentally dialogic process is how the text always leaves gaps for the reader to fill in with their own experiences and interpretations:

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[81] Examples of this can be seen in the following extracts: [CW2, CW5, CW6, CW9.1, CW25, CW28, CW42, CW46, CW49, CW50, CW51, CW63].

Thus whenever the flow is interrupted and we [the readers] are led off in unexpected directions, the opportunity is given to us [readers] to bring into play our own faculty for establishing connections—for filling in the gaps left by the text itself. (Iser, 1978, p. 280)

In game narratives these gaps are normally filled in by audio logs, diary pages or other forms of environmental narrative (what Jenkin's calls 'spatial storytelling') that the player is challenged to find and extract for themselves, as in Ken Levine's (2008) notion of pull narratives. However, we can also see here a clear example of how gaps are simultaneously also being left for player expression through mechanical interaction within the game space – giving the player a set of tools and an environment appropriate to their use so the experience will feel 'fair'. Interpretive gaps in interactive media, like games, are not only narrative but ludic, and in the process of design these often blur into one another as disciplines like the level designer attempt to fuse one to the other.

For these kind of collaborative poetics to emerge a studio culture is required that is loose enough to either allow ideas to flow from unusual sources (the Amanda Ripley example) or via conversations across deliberately constructed links (the Dr Kuhlman example). According to Greg Kasavin the challenge is also to create an environment that is capable not only of producing such emergence, but in recognising its value in order to create "narrative that's connected to the mechanics and the play experience," and the key to this, for him, is to create "a development environment where you can recognize those opportunities and then do something about it" [GK47]. Kasavin calls this the 'Andrew Ryan moment', the point at which the game can best "reinforce the theme" [GK32]. This moment is a piece of industrial theorising named after the game *Bioshock* by legendary designer Ken Levine, which many of my interviewees cited directly as a watershed moment in videogame storytelling [DP36; GK46; SG3; RP6] and on which one of my interviewees (Steve Gaynor) worked before going solo. As a piece of industrial theorising it conforms to an issue O'Donnell identifies as endemic to videogame development as both a young discipline still working out its terminology and

one dominated by enthusiastic gamers, that there is a tendency that instead of referring to technical

terms as might be the case in the film industry (jump cuts, smash cuts, dolly zooms) it is far more

common to refer to other games to "provide discursive resources for developers trying to describe

abstract concepts, like game mechanics" (O`Donnell, 2014, p. 42). Evidence of this is the fact that

Woolley and Lay both separately referenced the influence of *Metroid* (Nintendo, 1986-2017), on

discussing their approach to spatial narrative.[82] This demonstrates both a level of knowledge

required to be an insider, and suggests games themselves become a kind of "lingua franca", that

O'Donnell goes as far as saying compensates for the very fact that there is still no clearly defined

discipline of game development (2014, p. 42).

Given the existence of huge sites of industry discourse, like the yearly game developer's conference

in San Francisco and the industry blog Gamasutra where practitioners regularly reflect on their work,

it may be too much to say that there is no discipline of game design, but it is correct to say this

discipline is more protean – which is something Johanna Weststar (2015) has sought to show in her

application of the term 'occupational community'. It is this looseness that I have tried to show allows

for the collaborative poetics discussed above, and one that results in the tendency to refer to other

games in terms of specific examples rather than in more generic forms. This is both a strength and a

weakness of the industry because as O'Donnell rightly claims, drawing on Sharon Traweek's (1988)

work analysing the social dimension of the work of high energy physics, such insider language can

also be a way to exclude those who are deemed not to belong, closing these communities off in the

manner defined by discourse analysis:

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[82] Specifically, Woolley uses the term 'metroidvania' [CW50], a now broadly accepted genre classification that merges the two iconic Japanese game series *Castlevania* (Konami, 1986-2019) and *Metroid* (Nintendo, 1986-2017), into a portmanteau term that alludes to their shared trait of structuring environmental puzzles across a large, contiguous environment, which is slowly unlocked by a growing roster of player abilities, tools and keys. Meanwhile, Lay refers directly to Metroid Prime (Nintendo, 2002), an iconic entry into the latter series. The fact that Lay even surprises himself with the phrase, "as the areas unlock a little bit Metroid-Primey where you… Metroid Primey brilliant [laughs]!" [DL34], indicates the spontaneity in the way such moments of *lingua franca* occur in speech.

Insider language, as Traweek (1988, 122) notes, 'creates, defines, and maintains the boundaries of this… community; it is a device for establishing, expressing, and manipulating relationships in networks; … it articulates and affirms the shared moral code about the proper way to conduct [scientific] inquiry.' (O`Donnell, 2014, p. 43)

For Kasavin "one of the really painful challenges of game development" is that games tend to come together fairly late in the process, and it is only at such a moment that the Andrew Ryan moment tends to come into focus [GK48]. Because production environments, according to independent developer Lucas Pope, are "so much in flux all the time" such moments, even if they do emerge at all, are difficult to take advantage of and sometimes it is just a case of getting "lucky" [LP2]. Even for Lucas Pope, who largely works solo, it takes a good deal of mental resources to develop and manage ideas in order to build in the system looseness required to capitalise on such last minute flashes of insight. In short, whether a studio is big or small (or even a single individual) the problem is the same: a production environment needs to be in a mode of flexibility to be able to realise the potential of emergent ideas – those that organically arise from the complex interaction of various creative individuals across multiple disciplines. But as chapter 3 considers the approaches big and small companies take differ wildly to accommodate this, and as the next chapter shows this puts the looseness required of creativity in conflict with the control that the commercial side of the equation wishes to impose.

DISCIPLINING THE PROCESS: CONSTRAINTS AND AFFORDANCES

But there is a degree of control even required in the management of ideas in studios. Because, alongside maintaining the processual looseness and openness required for creative ideas to flow in these collaborative networks and for emergent opportunities to be recognised, there is a countervailing need to close down processes when necessary in the name of efficiency. Above I

mentioned that collaboration also occurs between people and machines (in ANT terms between human and non-human actors), but such relations can also be used to regulate and discipline the creative process. This is because ideal processes and concepts can be formalised and solidified in such documentation or what Latour has called "immutable and combinable mobiles" (Latour, 1988, p. 227). According to Latour documents, for instance the game design document that lays out the core principles of the design and story at the beginning of a project, translates complex ideas into a what Latour calls 'paper worlds' where they can be grasped more easily by actors as they are transferred through all levels of the network, and combined with other documents to increase the strength of the network. The classic example given by Latour is that of the map, which sits at the end of an expansive network of discovery and mathematical projects that stretch back to Ptolemy and through the entire colonial period,[83] but also collapses the entire world into a form that can be taken in at a glance, transmitted and combined with other documents to increase the wielders knowledge and power.

Many of my interviewees discussed such documentation as a means of structuring their creativity. For instance, as he began to deal with more nonlinear stories, solo designer Dave Gilbert increased his prototyping and planning, producing "a lot of design a lot of paper" [DG42]. Taking a more mathematical approach, Emily Short discusses using "puzzle dependencies graphs" allowing the designer to "[adopt] the structure of the plot as the structure of your game" [ES38]. Whilst Payton attempts to reduce documentation in favour of human unmediated interactions "to talk through the problems and talk about the characters", he admits this is unusual and that "other teams" will often "do it by passing documents back and forth" [RP21]. Working in the more established and formalised production environment of the AAA sector, Lay talks about developing "a narrative bible" in which was recorded "rough stories about the locations and the people who lived there" [DL33] but also "a

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[83] Here maps were a crucial tool to the subjugation of the world by the West, an so the imperial age was a time when cartography became formalised into a discipline as demonstrated by Jerry Brotton's (2013) history of the subject.

very, very big spreadsheet"[84] containing key narrative beats to allow them to "parcel out those stories" [DL35]. Whilst narrative bibles are a more recognised term for these kinds of document,[85] I heard them called a range of other things including Vanaman referring to his document as a "global blackboard" that records "categories of facts… a giant list of what's true… hundreds and hundreds of items long" [SV16].

Regardless of their name, such documents act as somewhat centralised resources in the otherwise decentralised network that facilitate the dispersal of narrative within the virtual environment by a range of different designers within the wider collaborative networks. Clearly the way writing flows into a game, much like code, is incredibly dynamic making it a very different on a functional level from that of a novel or screenplay. Ultimately, just as the player is not aware of the code bringing the virtual environment to life, they will not be aware of the database in which the text is stored.[86] The dispersed nature of the process leads to challenges in creating narrative coherence, for instance, reflecting on the process Lay describes it in terms of "one of those sliding puzzles where you're trying to get the squares in the right place" [DL35]. Such an image of story chunks as discrete units that can be moved around (not just within the fiction of the game space but between the different departments that make up the studio), brings to mind Janet Murray's concept of narrative primitives, a term she uses to describe the basic building blocks of the story that in an "interactive text" like a game often take the form of the "actions of the interactors themselves, as structured by the author" (Murray, 1997, p. 190). The narrative units are put into play twice: once during the creation of the text and once again by the player.

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[84] To emphasise this he went on to say, "It's very big, it's insane." [DL35]

[85] Gaining traction as they are in the world of transmedia television where it is becoming increasingly important for show runners to organise and plan increasingly sprawling and layered narratives (Clarke, 2012).

[86] Such a process is true of even the most linear games, because text like everything else needs to be stored in a format the computer understands (ie: a database) so that the right segment can e called upon at the right time.

In the highly technical field of game development such 'immutable mobiles' are not restricted to paper documents, but to the world of code underpinning the myriad communicating software programmes that form interfaces between different parts of the studio. These can be understood in terms of ANT's notion of the apparatus, which explains a process of delegation in which material objects become inscribed with the ideas, purposes and values that constitute them. For instance, in *Laboratory Life* Latour explores how the centrifuge, developed at the end of an expensive process in another field, becomes a closed object that can unquestioningly be used in the first stage of a new project in another field. Drawing on philosopher of science Gaston Bachelard, Latour describes the notion of scientific apparatus as "reified theory" since each one embodies previous innovations: "The apparatus and craft skills present in one field thus embody the end results of debate or controversy in some other field and make these results available within the walls of the laboratory" (1986, p. 66). In Latour's analysis of technoscience (the term he uses to describe the convergence of scientific practice and technology), such apparatus become vital components in understanding how scientific ideas are either transformed into facts or discredited as artefacts, and for our purposes they aptly demonstrate how iteration functions within the games industry. Software programmes allow ideas to be carried through various stages of development in an iterative fashion. For instance, Woolley reflects how they used the programme *Sketch Up* to block out virtual environments [CW7] and modular assets [CW9] to quickly build environments in order to quickly test ideas. Sometimes also called 'grayboxing' or 'whiteboxing', this is the practice of building levels using simple geometry with a low polygon count and no textures. Like architectural maquettes these environments are easy to manipulate by and transmit between developers in a variety of disciplines, and they limit the wasted time involved in building too much of a level before problems are noticed.

This concept of the apparatus fits particularly well with the role middleware[87] solutions function in

the game studio, as well as management paradigms like agile software development (explored in the

next chapter). This is even the case at the highest levels of the industry where game consoles like

Sony's PlayStation are manufactured as black boxed apparatus by platform holders, who use them

to control access to the market for third party publishers and developers (See Altice, 2015 for a

particularly salient example in how Nintendo engineered the NES to corner the American market).

Large publishers, who typically gain access to development kits (SDKs) earliest and decide what can

and should be built with them, are guided by the constraints and affordances the technological

architecture of such apparatus allows. Ideas become naturalised within (delegated to) the object and

bear an unseen influence on the work they are put to further downstream. All these, whether

physical (hardware) or abstract (software or methodologies) constitute specialised black boxes that

embody decades of iteration and thousands of hours of labour, but also bear residual traces of code

and value systems (reified arguments and processes) that have an influence upon the production at

hand.[88] For instance, a crucial factor to our understanding of game engines (explored below) as

apparatus is that they typically bear many traces of legacy code, sometimes even belonging to the

games for which they were originally designed.[89]

A particularly strong example of this can be seen at work in Failbetter. Gardiner stated above how

they sought to maintain their specific production culture and the internal consistency of their vast

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[87] Middleware describes software programmes licenced from third party companies that can provide a variety of highly specialised tasks ranging from realistic object physics (Havok), audio manipulation (Audiokinetic's programme Wwise), and most intriguingly Speedtree (by Interactive Data Visualization, Inc) which helps companies produce vast amounts of foliage via procedural methods to populate the fauna of increasingly large open worlds.

[88] Echoes of Barthes' notion of mythology, where the first order signifying structure of language is taken up and built upon within the second order signifying level of myth, is inescapable (Barthes, 2009b).

[89] For instance, the Source Engine still bears coded traces of the games Valve Corp. developed alongside it, a fact well known to those in the industry and is alluded to in the highly experimental and self-reflexive indie game *The Beginner's Guide* (Everything Unlimited Ltd., 2015) by Davey Wreden. Here the game's narrator (Wreden himself), outlines how the engine is so suited to the construction and traversal of internal geometric spaces like corridors, which relates to its origins in the development of the first-person shooters such as *Counter Strike* (Valve, 2000) and *Half Life* (Valve, 1998).

narrative universe, through conversation, but such a statement obscures how such conversations

are often enabled and controlled through technological interfaces that materialise workplace

interactions. Gardiner also talks about the complicated array of documentation and programmes

that help to steer the ship including "a lore spreadsheet which has got more than 200 columns" and

a content management system which he describes as "the best source we have" for writers to find

content "relevant to what they're writing about and kind of bone up on it" [CG4]. The content

management system thus serves a dual function: whilst it is a material instantiation of information

that was once circulating around fleshy minds (one of Latour's paper worlds), it also more actively

participates in the process of quality control itself – of structuring the context of the game by

providing guidance to new writers. In a sense these systems act as servomechanisms in cybernetics,

that use iterative loops to improve inputs by assessing outputs against the larger culture and feed it

back as a new input, refining both processes and data in the process.

Indeed, managing the dense and sometimes overlapping narrative universes of *Fallen London* and

Sunless Sea (2015) across such a large writing team wouldn't be possible without recording and

managing the ideas within some kind of database. For Lev Manovich the database is the

fundamental model of postmodern information-based society, and therefore the need to develop a

poetics of the database a pressing concern that is at the centre of his project:

> Following art historian Ervin Panofsky's analysis of linear perspective as a "symbolic form" of
>
> the modern age, we may even call database a new symbolic form of a computer age… a new
>
> way to structure our experience of ourselves and of the world. Indeed, if after the death of
>
> God (Nietzche), the end of grand Narratives of Enlightenment (Lyotard) and the arrival of the
>
> Web (Tim Berners-Lee) the world appears to us as an endless and unstructured collection of
>
> images, texts, and other data records, it is only appropriate that we will be moved to model
>
> it as a database. (Manovich, 2002, pp. 194–195)

Manovich goes on to explain that the database form which is unordered and non-hierarchical in character is the natural enemy of narrative "which creates a cause-and-effect trajectory of seemingly unordered items (events)" (2002, p. 199). Manovich understands these two forms – the traditional linear narrative and the radically new non-linear database – to be diametrically opposed, "competing for the same territory of human culture" and the "exclusive right to make meaning out of the world" (IBID), a statement that entirely recreates the terms of the narratology/ludology debate in all but name. Indeed, such a pat distinction does not stand in practice because, as I have demonstrated throughout this chapter, for companies like Failbetter and Campo Santo the database form is explicitly and deliberately drawn upon to facilitate the construction of a narrative. Manovich softens his stance in a later caveat in which he admits that "a database can support narrative, but there is nothing in the logic of the medium itself which would foster its generation" (2002, p. 201). The above example demonstrates that such a database is not just a system to help get narrative into the game, but an encyclopaedic resource (a kind of searchable in-house wiki) that can inform and structure the act of writing from the very beginning.

But if all this information is stored in databases how best to activate it and put it into play? Design writer Donald Norman makes the distinction between 'knowledge in the head' and knowledge in the world' (2013, pp. 74–75), the former being highly efficient but makes extreme demands of our learning and long term memories, and the latter being highly convenient but hard to utilise because it requires searching the environment and may easily be lost. For Norman, the reason we use props like calendars and meticulously arrange our working environments is an effort to structure the specific information available in our environment to compliment the more general knowledge we hold in our heads. The processes used by Failbetter enhance the benefits of both types of knowledge and mitigate their disadvantages by constantly keeping them in motion. Indeed, this is essential for a

long-term service-based model[90] like *Fallen London* inevitably involves a degree of workforce churn

less common in discrete short-term projects. In light of which, such mechanisms not only help to

streamline the process but to acclimatise new staff, in particular to quickly align their own voice to

that of the project [CG24].

An effective way to create meaningful exchanges between the database (the technogram, where the

narrative can be stored in its entirety) and the collaborative poetics of the work force itself (the

sociogram, where it can be actively used in the creative process) is to make "writers authorities on

the stuff that they've written" so that they can become a living "resource" [CG5], therefore

mobilising fragments of the database into the minds of human actors. The creator's minds thus act

as a dispersed form of RAM to complement the ROM storage of the documentation, and the creative

process here can be seen as a constant translation of informational units between the database and

the human actors, who are partially turned into temporary human databases.[91] Just as Espen

Aarseth (1997, p. 1) sees the fundamental qualities of cybertext poetics to be a fusing of player and

machine into an interactive feedback loop, such events regularly occur in the production context as

well – another example of play tendencies and the formal characteristics of games echoing the

means by which they are assembled. Even integrated workflow manager and communication

programmes like *Slack* (Slack technologies, 2020), for instance, enact their own form of quality

control which can allow a small studio to handle vast amounts of information using procedural

methods. This is because Slack not only allows users to schedule work but facilitates writers to

regularly be involved in creative conversations about the game's lore (its sprawling background

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[90] Such service based models of play that involve playing the same game as it evolves over a long period of time and regularly investing in it through a monthly subscription or occasional smaller investments (microtransaction) was initially ushered in by the emergence of the MMORPG as a subscription based service, but is rapidly becoming a core approach of the industry at large (Schreier, 2017b). This model allows developers to build and maintain long term and highly committed player communities (what Celia Pearce (2011) calls communities of play).
[91] Rather like the books memorised and constantly repeated by the characters in Ray Bradbury's (1953) dystopian novel *Fahrenheit 451*.

story, only indirectly told to the player but informing every aspect of the game none-the-less) and keeping such discussions "public" allows the immense knowledge load to be dispersed over many minds so that "at least it percolates up and some of it sticks" [CG6].

In the games industry being on the same page as your team members generally means being on the same software programme. And such tools can be diverse, for example small teams often use the most unlikely programmes to prototype ideas. At Wadjeteye games Dave Gilbert communicates his ideas to his artist via "stick figures and MS Paint backgrounds" [DG15] and Sean Vanaman uses the interactive writing tool *Twine* (Chris Klimas, 2009) to produce small dynamic conversations that act as character sketches in the form of "interactive fiction" [SV20]. Even in larger teams designers are constantly looking for new tools to better facilitate their processes, with Dion Lay telling me he was going to use the screenwriting software *Scrivener* (Literature and Latte, 2020) on future projects that allows you to "mark-up dialogue and characters" [DL37]. The fact that a game developer at a major studio is considering using a tool developed for screenwriters is a pretty material example of narrative becoming a much bigger deal in the games industry, not to mention the increasing convergence between film and games industry in general (Jenkins, 2008). Indeed, such programmes, so often overlooked in accounts of development, are prime examples of non-human mediators that, according to ANT methods, are vital for the social functioning of a given assemblage.

THE GAME ENGINE AS APPARATUS

After all this discussion of middleware programmes it leaves us to address the virtual elephant in the room; the biggest of these technological entities that structure the collaborative network is the game engine itself. Game engines are according to O'Donnell the "underlying software of a game" providing a "platform" (2014, p. 286) on which everything is built. Though in order to differentiate them from more ad hoc software programmes we have been discussing so far I would add that they

are the unified and complex, modular software arrays that sit at the very heart of the studios and facilitate the flow of code, data, art assets, physics and other game elements into the code base. Several high-profile engines exist that are regularly utilised in AAA development. Some are all encompassing like *Unreal* (Epic Games, 1998-2020), *CryEngine* (Crytek, 2002-2020), *Unity* (Unity Technologies, 2005-2020), and most recently *Lumberyard* (Amazon, 2016-2020), whilst others focus on specific areas like physics in the *Havok Engine* (Microsoft Corporation, 2007-2018) and smaller engines focus on specific genres like the self-explanatory *RPG Maker* (Enterbrain, 1992-2015) and *Adventure Game Studio* (Chris Jones, 1997-2019). In the process of doing this they draw together a series of different elements, which may have been produced in a variety of other programmes by people working in entirely different disciplines, into a unified whole. In some ways they are often thought of as synonymous with a studio's production pipeline, a concept touched on in the next chapter, but in spite of their centrality to the production process they don't fully subsume all the nodes around them[92] and are best thought of as a kind of interface between different elements of the production process. In a sense engines form an 'obligatory passage point' to most processes and objects produced in the studio (Latour, 1988, p. 245). This is a term used in ANT (adopted from military strategy) to denote a particularly strong node through which actors are made to pass.

In most cases it is easier and cheaper to license a flexible third-party engine like *Unreal 4* and either put up with its specific quirks or hack in other custom modules to facilitate development. Creating custom engines has huge advantages, not least being able to craft them from the ground up based on the specific demands of the game,[93] but is also a hugely ambitious undertaking and usually

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[92] For instance, concept work, unless it is included in the game, is an important preproduction task that is often handled outside the engine and often using analogue processes.

[93] In a talk on the topic at techie conference Digital Dragons in 2017, Technical director Clive Gratton echoed Napper's priorities whilst also bringing into the mix the nature of the source material:

> We've got a real-time lighting model because the source material for Alien Isolation is obviously the film Alien, where there are lights flashing and turning on and off all over the show. We wanted that as a feature of the game, and so therefore it's a feature of the engine. (Gratton, 2017)

beyond the reach of all but the larger and better funded AAA studios with highly skilled engineering

teams.[94] When a studio creates their own engine, they not only avoid the inscribed values of off the

shelf engines noted above, but they invest significant capital in creating tech that can be licensed in

turn (or at least used on future projects). The engine used to create *Alien: Isolation* was custom built

by Creative Assembly and named *Cathode* (no doubt in homage to the analogue technology that

makes up the world of *Alien*). The engine was specifically tuned to support the kind of complex

ambient and multisource lighting that the *Alien* films are renowned for, and lead designer Gary

Napper reveals the reasoning behind the custom-built engine in a promotional pitch for technology

partners AMD:

> We had a very definite idea of the kind of game we wanted to create. We knew we had to
>
> have rich detailed claustrophobic environments… so we needed an engine that can support
>
> that… By creating an engine alongside the game we were able to really maximise the focus
>
> of the engine to support the game we were making. (AMD, 2015)

This video, and an accompanying blog post taking a deep dive into the technical underpinnings of

the Cathode engine on AMD's website (Davis, 2015), demonstrates another link in the larger

network between Creative Assembly and AMD, who worked with the studio to ensure the game

worked better on their range of graphics cards than rival Nvidia (and then trumpeted this fact loudly

in their article). This mutually beneficial relationship is not only a good example of coopetition

(Sammut-Bonnici, 2015) between companies, a portmanteau term that points to moments of

collaboration between businesses for mutual (though not necessarily equal) benefit, but also

highlights the range of actors that can be found on the network as it extends outwards from the

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[94] Examples of some proprietary software engines include Frostbite (DICE, 2008) at EA, Fox Engine (Kojima Productions, 2013) at Konami, and Decima (Guerrilla Games, 2013) used by Sony on some of its first party games.

studio. In particular it is a vivid example of the studio strengthening its network by aligning its

ambitions with the business interests of others and by doing so turning them into allies.

However, it is also important to note also that the game engine itself is far from a stable entity. Even

as it attempts to rationalise, routinise and gather together the elements of a project, as well as

setting much of the aesthetic agenda, in the chaotic conditions of the game studio, it is constantly in

the process of being rationalised and routinized itself. Clive Gratton (2017), one of the engine's chief

architects, speaks of the harrowing production of the engine alongside the development of the

game, which resulted in six months of wasted work as the development of core scripting capabilities

were delayed until well into the production cycle (rather than being finished in pre-production as

planned). Nor was the engine itself built from the ground up, but derived from legacy tech used for a

much older game, *Viking: Battle for Asgard* (2012), which as Gratton (2017) summarises is far from

Alien: Isolation in its structure. The tendency to reuse older material that is so intrinsic to the

iterative model of game development is here a hindrance rather than a help. Such breakages provide

key moments for enquiry, since the hidden structures that guide production become apparent.

The Cathode engine and its live editing capabilities translated in practice as a considerable support

to below the line workers, such as level designers like Catherine Woolley, who are able to exercise a

degree of creative freedom within the constraints the engine provides. Indeed, Woolley praised the

engine for allowing multiple designers to efficiently work at a variety of levels and even "on the

same environment" [CW36] simultaneously.[95] Just as the more ad hoc software processes of

Failbetter not only allowed the team to cohere but contributed to forming the narrative of the game,

the fluidity afforded by the engine here not only made it easier to work on virtual environments, but

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[95] One would think this would be the least you could expect of an engine in a big AAA studio developing a sprawling game with a huge team, but rumours abound of the development of Destiny by bungie as plagued by an engine so cumbersome and inefficient that any change to any part of the game required hours for the engine to process (Schreier, 2017a).

also helped those environments to be more effectively connected up into a coherent, contiguous space. Indeed, Woolley takes pride in noting that the player is free to travel around the entire space station at their discretion [CW25] and that spaces are arranges to emphasise their connectedness [CW37]. That environment is the Sevastapol space station, the singular and claustrophobic setting of the game, a coherent environment in which each locale is joined logically and contiguously with the others and traversed by miles of air vents, tram lines and corridors. Although this narrative space is a direct product of the engine that bought it into being, the coherent spatial logic of the Sevatapol now replaces the engine that produced it, mimicking the engine's function in the logic of the game text. Just as during production the Cathode engine bound all of the functions that formed the game, the Sevastapol now binds the virtual space of play, with all of the unique aesthetic elements, spatial dynamics and lighting effects that make it up, sealing them from the vacuum of space, which presents a hard barrier for the stranded player. If gameplay can be thought of broadly as "free movement within a more rigid structure" (Salen and Zimmerman, 2003, p. 305), then the engine is a major constraining factor on both the free movement of the designer producing the game and of the player within it.

The game engine is something rarely considered in games scholarship, but as I have shown here it bears a huge influence not only on the production culture and organisational structure of the studio, but on the structure of the textual product of that process. In terms of a definition, then, an engine can be thought of not only as something that drives game production, but as a rationalising device that brings together into an array all the discrete elements that make game design possible, whilst providing a framework to streamline and make more efficient the complexities of coding a videogame. It ultimately holds in place not only the elements of the game, but numerous interests and agents from both inside and outside the studio, such as the partnership with AMD and the original source material of *Alien* which influenced the engine's lighting system. Indeed, the game engine functions in a similar (although much more extreme) manner to the animation stand in

Thomas Lamarre's study of anime, which he describes as an "ad hoc, a combination of devices and techniques designed to rationalise and perfect an arrangement that already existed in "paper animation" (2009, p. 16). By bringing together such a wide range of processes, technologies and individuals, the purpose of a game engine, like the animation stand, is to attempt to undertake a rationalising, centripetal force on the unfolding, emergent creative process of production. But it also acts as an apparatus in ANT terms, one that reifies the thousands of hours of labour previously expended and the expertise and knowledge inherent in that, as well as folding into it the code of previous games. In this sense O'Donnell's stance that the games industry is suffering from a kind of 'institutional Alzheimer's' due to a culture of secrecy that restricts the formation of institutional knowledge is only partially true. Whilst it is true that few specialists remain in the industry long enough to transform their own knowledge capital into institutional knowledge, the knowledge accrued is still available in some form inside complex technological structures like engines, embedded in their very codebase. Such seemingly non-human, technological actors can thus be rethought as cybernetic entities consisting of organic and technological parts.

CONCLUSION

It is testament to the rapid progress made by production studies approaches in the field that three years later at Ritsumeikan University in Kyoto, Olli Sotamaa[96] was able to announce that the 'business track' of DiGRA had received a record number of proposals (a point that was duly reinforced by the fact that one could barely get in the room during most sessions). Since it is first and foremost to this growing and important area of game studies[97] that this thesis contributes, this chapter has sought to outline the methodological framework for my approach: a blending of production studies and textual analysis of media texts, framed by the intellectual apparatus (and

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[96] One of the speakers on the Dundee panel and now chair of the business track of DiGRA.
[97] An important forthcoming volume on this topic is being edited by Paolo Ruffino and due to be published by Routledge in 2021 entitled *Independent Videogames: Cultures, Networks, Techniques and Politics*.

vocabulary) of actor-network theory. I have also outlined in detail and justified the choices that

make up my methodological frame, which I hope will serve to fill in some of the empty landscape

Mäyrä finds constitutes game studies methodology. By proposing such a framework I also hope to

contribute towards the recent efforts to reinterpret (ANT would say, reassemble) videogames as a

complex interaction between multiple circuits of meaning including the tripartite model of

production, culture and marketing (Kline et al., 2003) that stresses the deeply interrelated nature of

these circuits.

> Our three circuits model situates digital play as it comes into being at the convergence of
>
> technological, cultural, and marketing forces in the mediatised global marketplace. In the
>
> technology circuit, we are referring to the practices of inventors, machines and users; in the
>
> cultural circuit, to the production and circulation of meaning in videogame as media 'texts';
>
> in the marketing circuit, to the communication practices that link marketers, commodities,
>
> and consumers in the gaming marketplace. Although it is useful for the purposes of analysis
>
> to distinguish between the circuits, in practice they interact in a state of dynamic process.
>
> (Kline et al., 2003, p. 23)

Although Kline et al.'s three circuits model, which attempts to reconcile insights from and create a

productive dialogue between the dominant approaches of media studies, political economy and

cultural studies, is an important contribution to the material turn of game studies (Apperley and

Jayemanne, 2012), to my mind, its emphasis on marketing as the third pole of the circuit limits the

production context of the enquiry to too great an extent. For the authors marketing allows their

theory to "'close the loop' between corporation and customer, reinscribing the consumer into the

production process by feeding information about his or her preferences and predilections back into

the design and marketing of new game commodities" (Kline et al., 2003, p. 56). This thesis thus

marks an attempt build production back into the three circuits model and, by showing how the

production context interacts with and extends into the text, and how audiences are imagined within

the context of production, to show how this intersects with the other aspects on the circuit.

Marketing is not neglected entirely in this study (for instance, in chapter 3 I look at a crucial aspect

of the marketing of *Tomb Raider*), I have decided to downplay this aspect of production due to the

fact that it has already been well covered by Kline et al.'s method as well as in recent publications on

marketing as a key area of enquiry for game studies (Zackariasson and Dymek, 2016) and

promotional theory (See the special issue of Kinephanos edited by Vollans et al., 2017).

In terms of this refocusing onto the neglected production apparatus of the games industry, this

chapter has argued that the particular arrangement of trajectories and apparatus that makes up,

say, a game studio (or an neuroendocrinology lab) also constitutes its "cultural specificity" (Latour

and Woolgar, 1986, p. 66), or what I have been calling its production culture, and thus continues to

inform its approach or worldview from project to project. I believe the strength of ANT as a lens

through which to analyse that culture has been demonstrated in the above account. One particular

strength of it as a framework is that it places objects on the same ontological plane as humans, and

so the notion of culture here is one that is mediated by such artefacts as much as humans. These

non-human actors effect changes in a network in just the same way humans do and are often crucial

in developing ideas and techniques, as the discussion of the engine as an apparatus above shows.

One outcome of this understanding is the realisation that because such apparatuses can long outlive

the human intentions that created them, the processual norms they establish can be quite hard to

break from.

The above discussions of collaborative poetics and their tension with constraining factors, give a

sample of the kind of theoretical narratives that illustrate the potential of my method of grounded,

qualitative research and thick description to explicate the nuanced discourses that exist in complex

actor-networks like game studios. More importantly for my argument these discussions demonstrate

the variety of instances of industry theorising occurring even in a relatively small sample. The method, by combining a narrative account of the research participants with an emphasis on *in vivo* statements with academic theory, demonstrates the clear links between industry and academic theories within the field of game development and demonstrates the advantages of bringing a production studies approach to game scholarship.

As can be seen it is perhaps impossible to study the application of narrative as an intentional act at a purely formal level, rather it is effected so much by the structuring realities of the game studio and its complex work flows, what the business calls a pipeline (O`Donnell, 2014), that it becomes essential to consider the production realities of the object of study. Such anthropological work, of the kind carried out in this thesis, must be conducted at a far greater scale and frequency and the tendency of game studies (and the wider humanities) to ignore the production context of the work is a misleading fallacy. Key concepts from Actor-Network-Theory (ANT), including 'apparatus', 'mediation' and 'translation' have aided this process, demonstrating the framework's applicability in practice as a means of linking together textual analysis with the production context. Meanings and ideas circulate within material industrial practices, and, as the development of the independent scene has demonstrated in recent years, can modify those practices in turn. Using the tools provided by ANT the traces these transformations leave can be analysed and placed within wider discourses of reception and promotion that act as a vital interface between industry and consumer (Kline, Dyer-Witheford, and de Peuter 2003), as well as giving a deeper understanding of the game text as a complex cultural artefact.

A discussion of the collaborative process that arose from my interview data helps us to rethink these issues, as well as to reframe the ludology/narratology debate. Collaboration is dictated by the processes employed and the manner in which the studio is organised, and this becomes all the more essential in larger studios which inevitably lack some of the closeness clearly seen at play in small

indie microstudios. In this instance such collaborative networks have to be simulated and I argue in the next chapter that this is largely achieved through restructuring the production environment around the principles of agile development, which have been so thoroughly taken up by successful studios in game development to increase efficiency and improve creative cultures. The collaborative process of making connections within the network also continues after the game is published, especially for smaller studios who rely more heavily on press coverage and word of mouth than the expensive marketing campaigns of the AAA industry [SV45].

Collaborative networks then, in the manner in which I am using the term, refer to a range of different phenomena as demarcated by scale (large dense networks or small loose networks) or by a variety of types including: networks within studios (intra-networks), between studios and even industries (inter-networks), based on personal relationships (affective-networks), embedded in larger communities of practice (expert-networks), and between humans and machines (cyborg-networks). Collaborative networks are also by their very nature highly recursive and emergent in structure (thus utterly fitting the interactive texts they produce). For instance, Lay discusses how input from the level designers [DL32] to the environment artists [DL14] and even the voice over artists [DL30] allows you to improve the quality overall through a recursive, iterative process, in which the output is constantly fed back and used as a new input to improve the overall experience. This conforms to the notion of servomechanisms in cybernetic theory (an important precursor to both game studies and the games industry), which describes a an evaluative mechanism that regulates the working of a system by assessing outputs against a desired state (the norm) and then feeds back those corrections into the system as modified inputs (Iser, 2001, p. 85). Indeed, the iterative structure of the game design studio, consistently vaunted in game design how to books (Adams, 2013, p. 45; Zubek, 2020)**,** may be one of the defining characteristics that distinguishes it from other types of studios in other industries

This is as much to say that it is not only the sociogram (the human actors) that make up a production culture, but the technogram (the software and hardware that acts as constraining apparatus). Because this culture is only partially understood and is entirely decentralised, changing a few qualities of the assemblage would undoubtedly have long reaching and emergent (ie: unanticipated) effects on its culture. This way we can say that in a given studio there are material and tangible documents (like narrative bibles, design docs, studio policy) that can be consulted, but also (and perhaps most importantly) a larger discursive series of ad hoc and informal protocols that circulate ideas through the studio, and through such dialogic processes the game studio turns into its own kind of text – the studio as a document that implicitly drives and maintains its unique production culture so long as the dialogue persists.

For Gavin Kendall and Mike Michael such emergent processes of identity formation from the systems (networks) in which actors are bound up is a key site of dialogue between the Foucauldian notion of governmentality (where the rule of prevailing systems is implemented in the individual via a range of complex mechanisms including self-enforcement) and ANT's notion that individual actors take on concepts and identities that also circulate in the network. In particular, they argue that Foucault's "sensitivity to uniqueness" and the "ad hoc" is a "useful counterpoint to Latour's emphasis upon the systemic" (Kendall and Michael, 2001), and meanwhile Latour's dogged emphasis on the role of the technological[98] acts as a corrective to Foucault notions of the disciplining nature of the governmental which tends to focus more on human processes, by discussing how "particular technological artefacts (that is, those technological artefacts that are embedded within material-semiotic systems)… serve in the reproduction of social order" (Kendall and Michael, 2001). Similarly, in this study I try to strike this balance between a studio's human processes (what Latour would call

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[98] The return of the non-human actors that Latour has characterised as the 'missing masses' in sociology which are so oriented around the human. See the essay 'Where are the missing masses? The sociology of a few mundane artefacts' for a characteristically playful account of the influence a doorstop has on a room full of academics (Latour, 1992).

the sociogram) and those embedded in technologies and objects (the technogram). It is also important to note, as per the discussion of documentation above, that what begins as a social relation often becomes embedded in a technical object and continues to exert an influence at a distance. Indeed in this I follow Boltanski and Chiapello here, who summarise Foucault's notions of discursive mechanisms – discourses being the larger term for the circulation of ideas that simultaneously structure and are structured by a specific domain of activity[99] – as a means of explaining the "the conduct of conduct" whilst also bearing in mind ANT's emphasis on the "agency [of] socio-technical arrangements" (Boltanski and Chiapello, 2007, p. xv) as deeply embedded in those processes.

Whether framed as cooperation or compromise, we can see here a certain division of labour I have begun to touch on already, where the narrative director strives to tell a story and the level designer strives to create an enjoyable environment to interact with. The act of incorporating the narrative ambitions of the writers into the constrained physical space of the level leads to a revision of the material, that ensures it functions both mechanically and narratively. Unlike the ludologists polemical division of story and gameplay, we can see here in very material terms how these crucial elements of modern AAA game design are iteratively and recursively created through the recursive processes of game design and the interactions between two or more departments within a larger network. Woolley provides a particularly striking example when discussing audio priority, the manual and procedural coding of narrative segments to only trigger if the game state is appropriate. Crucially, in realising this, another department is folded into the array in the form of the audio team. This detail goes to demonstrate how the game's narrative functions as an emergent outcome of the interactions between these three departments (narrative, level design and audio), each with their

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[99] To be even clearer on this point James Paul Gee's discussion of discourse analyse discusses how specialist domains like scientific or gamer communities create linguistic norms and frameworks that they use to police and maintain the boundaries of their domains, a process that is explored in terms of gamer communities by Mia Consalvo and Christopher Paul (2019).

own professional priorities based on their skill sets. These priorities are exercised through apparatus that handle some elements of game development discretely before they come together to form the engine as an organising and totalising *gestalt* (for instance audio designers typically use a programme called *Wwise* (Audiokinetic, 2006) that plugs into the larger game engine). The engine acts as a kind of interface between the designers and the game, by pulling together the departments and their attendant desires, as well as the individual elements of apparatus they interact with. It presents a potent centripetal force (the kind of force that pulls things together and rationalises them), which, like gravity working against the pull of orbital bodies, counters the individual trajectories of the various departments and individual ambitions to create a coherent whole.

As a concept the notion of iteration mediates between the required mix of familiarity and innovation as seen in the uses of IP explored in the next chapter, but it is also deeply embedded in the structural characteristic of studio functionality. The larger the studio, the more developed its hierarchy and the more complex the processes that make up a game. But also with larger teams comes more contingency and potential slippage within the production processes and more potential sources of ideas and their modification. As good as ideas like the Amanda Ripley example are, it wouldn't have made it into the game without first being filtered through the writing department and the narrative director as gatekeeper. Nodes on the network like narrative director, technical director and creative director don't merely facilitate the interdepartmental flow of ideas, but also place crucial limits on them; to act as an inbuilt form of quality control. In short, they act as both centrifugal and centripetal forces, aspects of the interface that can both flexibly expand (in periods when idea generation is relatively open early on in preproduction) and contract (later on in the process when much of the game is fixed and it would be very expensive to change things) to control the creative process.

At this point we can see the ludology/narratology split explored in the introduction seemingly schematised within the structure of the studio. The writing team, of course, are largely responsible for the narrative and the level designers for what's 'fun' a common shorthand in the industry for describing the various emotions gameplay can produce (Costikyan, 2002; Hunicke et al., 2004; Koster, 2004). But as this chapter shows the very act of collaboration within the networks of the studio will dissolve these two qualities into each other more often than not; so we can say that gameplay and narrative are fused via the alchemical process of design (a term that I think captures the unpredictability and almost metaphysical nature of the phenomena). Already we can see that attending to real instances of practice helps us to reframe and ultimately bypass the blockage caused by the ludology/narratology debate in game studies. Yes, there is still a tension between these two aspects of design, but one rarely ever seems to be thought of outside of the other in actual development contexts, which suggests that the division at the level of academic theory (something like the primal scene of video game scholarship) is something of a myth – not because the debate didn't happen as Frasca famously claimed (it did, and we are still seeing its after effects), but precisely because it doesn't really matter. One look at actual processes of game development real spaces of production is the ultimate proof of this. In the introduction I said that I hoped the production context would provide us the final word on the ludology/narratology debate, and here it is: the resolution of the ludology/narratology debate is not to be found either solely in the text or the player base (although there are important clues in both these places), but in the space of the laboratory/studio where the pieces actually get put together, and practitioners use industrial theorising to reflect very consciously on how to do that. In particular this activity fits the famous model of game story telling laid out by Henry Jenkin's (2004a) in his influential essay Game Design as narrative Architecture, which not only sought to reconcile gameplay with narrative (acting as a point of mediation in the ludology narratology debate in a way that is analogous with the level designer mediating between narrative produced by the writing team and gameplay experienced by the

player), but suggested that videogame storytelling was fundamentally different from other forms dues to the fact that it was so heavily spatially constructed.

The following three chapters will build upon some of the key insights here to explore what I have identified as three key areas of enquiry. Firstly, the structure of the industry and its constraints on narrative; secondly, The complex interdependence of the AAA and indie sectors; and thirdly, the effects of new audiences on narrative, examined within the emergent genre of the walking simulator. The next chapter will explore how the creativity/commerce dialectic plays out in the complex networks of production in a studio context by critically examining the structural characteristics of the industry at large. Here I will attempt to show that, just as the structural characteristics of the industry fed into and constrained creativity for many of the developers above, they also contribute to the development and circulation of 'trade stories'; discourses that materially regulate and ideologically underpin the industry, thus stabilising the arrangement of individual studios within it (thus performing between studios similar functions that the documents analysed above perform within studios). One result of this is that they also set limits upon the kinds of stories that can emerge from these structural assemblages. Changes to the process of storytelling within those structures, therefore, conversely have an opportunity to rearrange the material composition of the industry itself, primarily via the rearrangement of the game studio as a basic unit in the array. It is this *reassembling* of the social via tangible and observable changes to its networked infrastructure that ANT has become an incredibly potent theoretical framework to describe and analyse such complex entanglements (Latour, 2005).

Chapter 2: Industry Theorising Through 'Trade Stories': A Textual-Economic Picture of Commercial Games Industry Structures and Practices.

Since the 1970s the global economic system has shifted towards new post-Fordist[100] regimes of capitalism built on ideals of flexibility and variability (Womack et al., 2007), or, as claimed by post-modern theorists such as Jean Baudrillard, the stable, physical commodity form of modernism has been replaced by the virtual "political economy of the sign" marked by the "the ascension of the commodity form into the sign form, the transfiguration of the economic into sign systems and the transmutation of economic power into domination and social caste privilege" (Baudrillard, 1988, pp. 58–59). This regime has been characterised as being underpinned by digital technology and new media aesthetics (Manovich, 2002; Schiller, 2000), and new technological platforms developed by Silicon Valley corporations (Srnicek, 2016); built around the distribution of immaterial products, produced through knowledge work rather than the physical labour that characteristic of the blue-collar period of industrial capitalism[101] (Hardt and Negri, 2001); and circulated in a thoroughly globalised and networked society (Castells, 2009).

Thus, in the post-Fordist era every step of the chain of production, distribution and consumption has been transformed. Accompanying these economic shifts, Martyn J. Lee has argued that since the 80s we have been witnessing the emergence of a new 'ideal commodity form' paradigmatic of post-Fordist capitalism in various electronic consumer goods that embody and reflect shifts in the

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[100] Just as the motor car broadly, and the Ford Model T in particular, are commonly seen to embody the production strategies and arrangement of Fordist-Keynesian mass production (Womack et al., 2007), with urban life restructured around new road systems, our current economic and social lives have been restructured around the internet and digital platform holders (Srnicek, 2016).

[101] Material goods and industrial process have not been phased out so much as outsourced to the poorer parts of the 'developing' world via processes of globalisation, a situation that Hardt and Negri (2001) define as neo-colonial in character since they extract wealth and materials at a reduced cost from the global south to enrich the multi-national corporations that are largely concentrated in the West or global north (where global north and south is starting to replace the hackneyed binary of Western/non-Western, which largely fails to account for the extreme growth of the Asian economies in recent decades, or the economic disparities between the Northern and Southern American continent).

economic superstructure towards more, "flexible patterns of accumulation" (Lee, 1993, p. 125). This leads to a new consumer culture, "a radical and vital constellation of cultural sensibilities, value systems and behaviours" (Lee, 1993, p. 125). Still, even compared to the wider shifting economic and cultural transformations that enframe it, the games industry itself is changing faster still, and this chapter will look at the games industry through a political-economic lens to explore some of the larger contextual pressures and how these are played out in individual studios.

The cultural industries, of which games are an increasingly dynamic part, have become a crucial area of economic growth, and increasingly embraced by neoliberal economists, most obviously during the New Labour period[102] where the positive dimensions of entrepreneurial creative labour became enshrined in policy buzzwords such as 'knowledge worker' or the 'creative economy' (Banks, 2007, pp. 1 & 14–15; Grainge, 2007, p. 21; Hesmondhalgh, 2013, p. 4). The utopian qualities of these concepts are embodied best in the writings of Richard Florida, whose work has done much to influence government initiatives at a national and local level. Florida imagines society being reconfigured by a new 'creative class' (2014, p. 9), whose transformative effects not only revolutionise industry and kick-start economic growth in a stagnant post-industrial era, but remakes the very fabrics of society in its own likeness as "fulcrums for… social transformation" (2014, p. xvii). In light of such discourses, it has been observed that the notion of creativity has taken on an entirely new set of meanings and values. As Oli Mould has provocatively claimed, the productive power of creativity has been leveraged by contemporary neoliberal notions of the self to instrumentally serve economic growth:

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[102] New Labour set up the Department for Culture, Media and Sport and the Cultural Industries Taskforce, to implement their vision for an economy Spear-headed by post-Fordist creative industries, which would find its fullest expression with the Creative Industries Mapping Document of 1999 and 2002 (Banks, 2007). For McRobbie this was a betrayal of the party's roots since, "from the viewpoint of New Labour, creativity seemed to have the potential for displacing and more or less doing away with the troublesome idea of 'labour' altogether" (McRobbie, 2016, p. 63).

The capitalism of the twenty-first century, turbocharged by neoliberalism, has redefined

creativity to feed its own growth. Being creative in today's society has only one meaning: to

carry on producing the status quo… Creativity can be used to produce more social justice in

the world, but it must be rescued from its current incarceration as purely an engine for

economic growth (Mould, 2018, p. 3).

A critical eye has been turned to creativity by political economists (Banks, 2007; Hesmondhalgh and

Baker, 2011; Ross, 2004), autonomist Marxists (Boltanski and Chiapello, 2007; Hardt and Negri,

2001), and cultural geographers (Mould, 2018; van Heur, 2010). A good example can be found in

Angela McRobbie's exploration of the uses of creativity in the British fashion industry, *Be Creative*

(2016), Angela McRobbie critiques how the largely female work-force of young fashion designers are

sold a dream of aspirational ideal of "middle-classification" (2016, p. 16). They are inculcated into

the discourse of creativity and self-attainment at art schools, lured by the romantic glamour of the

fashion industry and its well-publicised glitz, but enter a position of extreme precarity laden with

huge amounts of personal risk and self-exploitation, ultimately to be drawn on as a reserve labour

force by a feckless industry. According to McRobbie the spirit of entrepreneurialism, with its

romantic veneer of aspiration, is a core part of the neoliberal doctrine that serves to adjust the

emerging generation of millennials to "the idea of enterprise culture," and is also the "key

instrument" of the larger processes of work destandardisation in the West, which involves

"weaning" young people off social democratic values and the notion of a job for life (Ibid., p. 135).

Indeed, the positive spin the Florida effect places on the neoliberalisation of creative work is

severely undercut by the realities of production which require a conformity to tastes and

conventions that precludes the very freedom's implied in Florida's idealistic notion of a creative

class.

McRobbie finds it particularly unsettling that Florida's unscientific approach has been so thoroughly

accepted and "validated as public policy" (McRobbie, 2016, p. 44), something that she refers to as

the 'Florida effect'. To my mind it is hardly surprising (though, perhaps, no less saddening) that

Florida's optimistic vision of society should spread so quickly, especially as his conception of the

creative class is wide enough[103] to accommodate policy makers such as politicians or civil servants

that are able to put it into practical application, or media workers and journalists who are most likely

to embrace this romantic concept and thus to spread it far and wide. Everyone wants to be told they

are special, and here was a man doing just that in a "light-hearted journalistic style," that was catnip

to politicians, "in need of a fast fix and a novel… approach to urban issues" (McRobbie, 2016, p. 44).

The parable of creativity virtually spreads itself, but people like Florida were happy to be its

prophets.

Despite criticism of this latest socioeconomic panacea, new economic policy set about banking on

the creative industry and the new 'networked' digital infrastructure they were built upon (Castells,

2009). In this 'post-Fordist' society it is argued that regimes of 'immaterial' production led by the

labour of the intellect have come to displace heavy, material industry just as flexible modes of

production displace mass production characterised by Henry Ford's production line (Edwards and

Wajcman, 2005; Hardt and Negri, 2001; Womack et al., 2007). Ideologically this results in what Luc

Boltanski and Eve Chiapello (2007) have called the 'third spirit of capitalism', in which the economic

regime begins to recognise and internalise notions of creativity and innovation to newly hegemonic

ends. Cultural labour theorist Mark Banks notes that following the success of such policies it is

widely held amongst liberal democratic views that, "the future of *all* work is now widely assumed to

be adopting a cultural industry model," one assumed to be: "more creative, autonomous and

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[103] For Florida this new class consists of "science and technology, arts, media, and culture, traditional knowledge workers, and the professions [sic]" and fully makes up "nearly one-third of the workforce across the United States" (Florida, 2014, p. vii).

personally rewarding" (2007, p. 4). Given the significant changes to workplace practices spurred by such economic and social restructuring, empirical and theoretical studies of labour have unsurprisingly proliferated from a variety of academic vectors including cultural studies, studies of political economy, or newly emergent fields such as organisational, business and management studies (Hesmondhalgh and Baker, 2011, pp. 53–55).

The cultural industries are also seen as embodying a particularly important role within the larger societal transformations given their function as creators of symbolic meaning; that is, in its widely consumed products, social conditions are often explored or embedded (Hesmondhalgh and Baker, 2011, p. 69). Indeed, for Banks the raison d'etre of the cultural industries, "is selling short-term access to simulated worlds and altered states of consciousness," which makes them "an ideal organizational model for a global economy that is metamorphosing from commodifying goods and services to commodifying cultural experience itself" (Banks, 2007, pp. 22–23). Within this larger notion of the culture industries as newly oriented around such ephemeral digital goods and experiences (Pine II and Gilmore, 2011), few mediums can be said to do this with as much vigour as the games industry, whose very stock and trade is creating vividly immersive experiences built on interactive simulated systems as in Janet Murray's classic definition:

> Digital environments are procedural, participatory, spatial, and encyclopaedic. The first two properties make up most of what we mean by the vaguely used word interactive; the remaining two properties help to make digital creations seem as explorable and extensive as the actual world, making up much of what we mean when we say that cyberspace is immersive. (Murray, 1997, p. 71)

With the latest figures claiming that 65% of adult Americans play videogames on a regular basis (Ipsos, 2019) and the industry now vastly exceeding more established media in profit and scale

(Cellan-Jones, 2019) with an estimated global worth of 100 billion dollars (Keogh, 2019a, p. 16), games are rapidly becoming the key site where cultural ideas are explored and consumed *en masse*.

If the cultural industries can be considered emblematic of wider sociological shifts as many have claimed (Banks, 2007, p. 4; Hesmondhalgh, 2013; Lee, 1993), I want to suggest that game development can be seen as emblematic of or driving specific shifts *within* the creative industries itself. O'Donnell echoes this sentiment when he firmly makes the point, "[game developer] work is indicative of what labour has become in our current historical and cultural moment" (2014, p. x). Others have argued that, as a young, digitally native industry not rooted in longstanding national traditions nor as likely to mimic pre-existing schemas, the games industry embodies "extreme illustrations" of key characteristics of post-Fordist capitalism including traits of "interactivity, interdisciplinarity and velocity" (Cadin et al., 2006, p. 290). Although the exceptionalism of such claims might be contested, Janet Wasko (2001) after all has made similar claims for animation, it will be clear from the following discussion that the games industry is intensely, if not uniquely, organised around such modern labour practices. The games industry, after all, developed alongside the tech and software industry in a period of intense labour reorganisation under the conservative and neoliberal economic regimes of Thatcher and Reagan, a period in which the social welfare state began to be dismantled (McLoughlin et al., 1994), ushering in the wholesale development of neoliberal principles of individuality, flexibility and entrepreneurialism (Lee, 1993, p. ix; McRobbie, 2016, p. 16).

Videogames embody in their systems and narratives the extreme individualism and competitiveness at the heart of neoliberal economics providing a kind of "low-level domestic socialization for high tech work practices" (Kline et al., 2003, p. 76). Indeed, Kocurek (2015) has convincingly argued that as the key initial encounter between the American public and the new digital paradigm of the computer, which would over the next three decades come to utterly underpin digital capitalism

(Schiller, 2000), the arcade game instilled values of competition, self-improvement as well as the kind of familiarity with computers that would be essential to crafting the technomasculine subjectivity required of post-modern, post-Fordist regimes of labour within the new networked economies. In short, and to borrow a term from Althusser (2014), videogames interpolate us as digital subjects in the new flexible, networked, experiential and immaterial regimes of production and consumption characteristic of the present moment. And just as Kocurek sees videogame play as a seed-bed of new consumption and work practices demanded of the neoliberal subject, I argue that in many respects the games industry is a test-bed for the kind of management practices, structural rationales and processes that are becoming dominant in the modern workplace, such as those practices analysed by authors like Andrew Ross (2004) in his classic account of the graphic design studio during the dot-com boom of the 90s.

If this is the case, then studying the games industry, which functions within heavily globalised and digitised high-tech networks characteristic of modern 'informational capitalism,' (Castells, 2009; Dyer-Witheford and de Peuter, 2009; Srnicek, 2016), should be a priority for cultural industries theorists, but actually the industry remains shockingly under-examined in this field. Although writers like Banks and Hesmondhalgh acknowledge the games industry as a key player within the cultural industries, like Caldwell's polite nod to the videogames industry as a site of industrial theorising, their analysis keeps to more traditional forms of cultural communication such as film, music and television. Perhaps this is for the simple reason that such authors know enough to know that videogames matter (and matter to their theories) but are just so unfamiliar with them as a medium that they dare not wade into such unfamiliar terrain. Consequently, it is left to a new generation of scholars to unpick the vast contribution studies of the games industry could make to theories of political economy, the cultural industry's and theories of work and leisure amongst many other field of inquiry. Whilst Nick Dyer-Witheford and Greig de Peuter's ground-breaking political economic intervention *Games of Empire: Global Capitalism and Video Games* (2009) does a good job of

situating the games industry within the larger context of informational capitalism, where the "basic unit of economic organization is not the subject (be it individual or collective) but the network" (Allison, 2006, p. 265), few granular, empirical studies of such work practices and conditions exist. A notable exception is Casey O'Donnel's *Developer's Dilemma* (2014), which provides a thorough account of industry practices utilising interviews and embedded ethnographic field work into game studios in America and India to gain a sense of its globalised scale.

Like O'Donnell, whose aim is to undertake "a process of debugging coercive or hegemonic structures" (2014, p. 162) of the industry through the code base of its work practices, exploring how such practices effect creativity, this study is interested in such structuring issues as labour and management practices insofar as they might shape the studio as a unit and therefore constrain or enable the way narrative comes to be implemented in games, or structure the conditions in which certain professional or industrial narratives about the industry are produced. Just as platform studies explores the way the technology underpinning particular game systems affords certain forms of play or approaches to design (Montfort and Bogost, 2009), my broader assertion here is that the industry itself can be considered a similarly constraining system, and the myriad studios that constitute it as unique material assemblages (Farías and Wilkie, 2015) function rather like more flexible platforms upon which cultural works are produced.

It is my argument here, therefore, that in order to understand the kind of stories that are deployed in videogames, it becomes crucial to understand the precise nature of their production environment, and some of the wider contexts that shape it. It is to this purpose this chapter is directed, whilst also addressing the lacuna in political economic analyses of the games industry. To this end, I draw on the more general observations of Hesmondhalgh (2013; 2011) and Banks (2007) regarding the cultural industries, whilst moving from the general to the specific in each case by looking at the

uniqueness of the videogame context with the help of writers like O'Donnell (2014; 2012b, 2012a) and Johanna Weststar (2015; 2015).

In his landmark ethnographic study of the film industry, *Production Culture*, John Caldwell makes the case for exploring what he identifies as a particularly strong site of industry theorising: 'trade stories.' He defines these as the circulation of ritualised and repetitive narratives through which the industry "makes sense of itself" (2008a, p. 37). According to Caldwell such stories take many forms, serve many purposes and circulate in many different ways; often manifesting in the form of 'deep texts,' which are the kinds of theoretical practices ingrained in industrial structures and cultures, embedded in and circulating in industry focused publications, documents and publicity materials. Such texts are not stable; they "shift according to the industrial, regulatory, and cultural spaces in which they screen and circulate," (IBID, p. 99) and thus they can only be discovered anthropologically via "looking over the shoulder of crew members" (IBID, p. 26). Through a mixture of interviews and workplace studies Caldwell not only brings such trade stories to light but reveals, through critical analysis, their deeper ideological functions, particularly as regulatory mechanisms to stabilise production culture.

Although he doesn't use the term itself, Casey O'Donnell also observes several 'myths' perpetuated in and around the games industry that might be considered forms of such trade stories. These include the myth of fun ("you get to play games all day"), the myth of creative freedom ("you get to make the games you want"), the myth of stability ("You get infinite time and resources to make a game"), and the myth of wealth ("every game makes millions of dollars, and so do game developers") (2014, p. 148). In the short sections that follow I use these myths as frames to unpick key characteristics of the videogame industry in light of wider creative industries theory. These myths, as pointed out by O'Donnell, serve a similar function to those theorised by Roland Barthes as deeply ingrained and normalising concepts shot through with ideology, that serve to maintain and

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regulate cultural discourses. In *Mythologies* Barthes masterfully explores how these ideologies become naturalised within cultural structures and seeks to: "account in detail for the mystification which transforms petit-bourgeois culture into a universal nature" (2009a, p. 9). Over 60 years later the naturalisation of petit-bourgeois culture has been replaced by that of neoliberalism as the dominant metric of social control embedded in cultural forms and processes (Berlant, 2011; Littler, 2017), but Barthes' general understanding of how such discursive structures underpin real material conditions still stands. In short, I am arguing that the internal circulation of such trade stories project outwards to form and maintain idealised and reductively simple public perceptions (myths) of the game's industry's function, thus fuelling its desirability as a place of work and maintaining the vast, international labour pools it increasingly requires.

I end with a case study of the high-profile AAA game *Tomb Raider* (Crystal Dynamics, 2013). Drawing on interview data with its various creators, especially the writer Rhianna Pratchett, this case study both serves to illustrate a typical example of a commercial videogame studio structure and its constraining factors, whilst also exemplifying in concrete terms some of the precarity, instability and flexibility surveyed below.

THE MYTH OF STABILITY: GOVERNMENTALITY, CHURN AND FLEXIBILITY

The first myth to be addressed is the notion that, "you get infinite time and resources to make a game," which I have called the myth of stability, since this idealised notion suggests a stability of conditions within which games are produced. It is a myth that can perhaps best be refuted by the growing tendency for games to be released unfinished, either with unintended bugs or with key features missing to be patched in down the line.[104] Meanwhile, different approaches to 'early access'

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[104] *No Man's Sky* (Hello Games, 2016), for instance, caused a massive backlash on its release for not living up to the expectations of the audience upon years of hype, and several updates have since been released that add

(where games still in development can be purchased and played with consumers taking on the role of unpaid beta testers whilst developers gain sales revenue ahead of time to mitigate the inherent risk in production), have now been implemented on various platforms. The unfinished nature of much digital entertainment is symptomatic of the increasing amounts of churn that invariably occurs beneath the surface. O'Donnell uses churn to refer to the lack of time for reflection developers get within projects partly a result of too great a degree of feedback, which can result in "systems com[ing] to a dynamic standstill" (2014, p. 132), but churn more commonly describes the general volatility of the labour pool characteristic of videogame development being a multi-stage project-based activity.

Typically this has a greater effect on 'below-the-line' workers, the term used in production studies to denote the large pool of labourers and technicians that perform day-to-day tasks like artists and coders in the games industry (Caldwell, 2008a, p. 34), as they are often employed for a single game and when they are finished with their task either need to be moved to another game in the same company or must find work elsewhere. But 'above-the-line' production staff are not immune to this tendency, especially highly specialised narrative roles whose work is required more at the beginning and middle of a production cycle (Weststar, 2015, p. 1239). Such insecurity is exacerbated by the globalised nature of the industry, where "cultural firms and conglomerations search the globe for new production locations where deregulated institutional climates, advantageous tax breaks and cheap and compliant labour forces might be accessed and exploited" (Banks, 2007, p. 26). As observed by O'Donnell (2014) in his assessment of outsourced labour at an Indian game developer, this is particularly true of the games industry where huge multinational corporations like Ubisoft

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significant structural and narrative changes to the game. Like a digital ship of Theseus, the changes are so extensive it's hard to know whether to consider the current manifestation a completely different game to the original release. It is such shifting characteristics of the ludic text that make them a particularly tricky object of analysis.

possess holdings around the globe (Makuch, 2014), outsourcing work abroad to reduce ever mounting costs in an increasingly competitive market (Dyer-Witheford and de Peuter, 2009, p. 50).

Whilst such churn benefits corporations massively, it disadvantages employees especially in terms of workplace organisation and campaigning for better conditions. Hesmondhalgh and Baker found in their research that rather than drawing on the power of their numbers and lobbying for more secure work, the constantly churning labour pool and perpetually youthful work force, prompted anxieties of being usurped in workers already working to establish themselves (2011, p. 114). Workers tended to see competition from the next batch of eager recruits from art schools and universities the world over as a potential threat to their already tenuous position, and the industry benefits from encouraging this sense of competition between workers. Indeed, competitiveness is one such trait the games industry promotes through its gamified structures and the texts it produces alike, and its workers, being predominantly highly invested gamers themselves, are predisposed to respond to it (O`Donnell, 2014, p. 48).

In defining videogame development as an occupational community, Johanna Weststar has characterised the extreme overlap between the identities of gamers and game workers, arguing that they "take their identities from and are highly involved in the work of making games" (Weststar, 2015, p. 1250), just as hardcore 'gamers' frequently construct their identities around playing. Just as McRobbie (2002) argues that the hip design field of the late nineties and noughties was fed by the spirit of exclusivity and subcultural capital of the underground rave scene – with its exclusive guestlists, secret parties and need to be in the know – the enthusiasm expected of game workers is, I argue, derived directly from the culture of play. Such enthusiasm, often in the face of exploitative labour conditions, is not only a condition of entry into the industry, an "expectation for belonging," but mitigates development costs by encouraging a "complete devotion to the work" (Weststar, 2015, p. 1244). In other words, the supposed intrinsic rewards of development and its cultural cache

function as a means for executives to justify low wages and precarious conditions. Weststar finds this absolute "commitment to games and game making," a specific trait of the game worker that exaggerates the passion for working in media demonstrated by "ostensibly similar workers" working in other creative industries (Ibid., p. 1245). Her argument gives further credence to the importance of studying the games industry as a paradigmatic site of labour conditions in the cultural industries.

Such a process of self-regulation is typically understood in light of the theories of Michel Foucault. Indeed, according to Mark Banks overview of the terrain of contemporary political economic thought is thoroughly influenced by a 'neo-Foucauldian' conception of the 'governmental' which describes a "form of control that not only relies on discursively constructed and practically applied 'mechanisms of rule', but is also exercised through workers" and their likelihood "to actively manage themselves – and so appear complicit in their own subjection" (2007, p. 11). For instance, McRobbie sees such a concept as a key ingredient for a creative worker's tendency to self-exploit in order to pursue their dreams or enter a growing middle-class lifestyle and, drawing on Foucault, talks about the idea of "government as extending into everyday life so as to encourage the kind of activities that will enhance the place of the market in society" (2016, p. 64). *Such discourses and mechanisms contribute to* form *a 'dispositive', which McRobbie summarises as a "self-monitoring, self-regulating mechanism"* (2016, p. 38) *and Foucault has* elsewhere *described as* "a thoroughly heterogenous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures . . . the system of relations that can be established between the elements" (1980, p. 194).

In the previous chapter I explored the creativity exercised by the apparently below-the-line level designer Catherine Woolley, but such creativity is ultimately in spite of the larger system which still tends to fragment the workforce into smaller discrete units and increasingly specialist roles, which demonstrates the ultimately piecemeal nature of work for below-the-line workers such as coders

and level designers. Woolley even comments on the inconsistency and fluidity of naming

conventions, "we had our own numbers and levels changed and things move around" [CW27]. In

such a shifting landscape it becomes hard to develop consistent work, so individuals see their work

as modules that plug into the larger structure, for instance Woolley's levels revolved around certain

key events in which her role becomes "just figuring out what to add around them" [CW1]. This

arrangement provides a fragmenting force that keys in with O'Donnell's comments about no one

being able to see the whole picture on a large project – working on a single piece of the puzzle

without a clear view of how it fits threatens to create dissonance in the overall product. For

instance, Woolley is aware that Lay would have seen the process from an entirely different

perspective from her, and as she wrestled alongside the audio team with incorporating dialogue

realistically inside game environments in which players ultimately controlled the pace, she knew that

for Lay the same phrases existed in a more concrete form as textual fragments in a huge

"spreadsheet with all the strings for dialogue" [CW24].

Documents like this present the project in different ways through the pipeline and also help to

coordinate a process that is seen differently by different disciplines working with different forms of

raw material (narrative, graphical textures, 3D space, codebase, audio), all of which must be unified

in the finished product. Indeed, this sense of the modularity of one's contribution is reflected in the

tools made available to the level designers which further reinforce the interchangeability of parts.

Woolley speaks about using a process of "modular design", which like Lego bricks allowed designers

to "easily pick up bits and move them around and snap them into place" [CW9]. As Woolley

discusses it, it becomes clear such modularity is a double edged sword: it allows for the rapid

iteration and testing of ideas, which encourages creativity, but it simultaneously reinforces the

modularity of the level designers own role within the larger production culture. In this sense the

modular toolset used in many game production contexts, itself becomes an instrumental tool for

working upon the designer as well as the game; its approach to modularity and efficient iteration not

only regulates the processes that create the game space but governs and disciplines (in Foucault's

sense of the term) the self to conform to a desired role within the studio – the flexible worker

required of cognitive capitalism. Indeed, such tools are another echo of the model of a

servomechanism, feeding output back to input.

Whilst ANT might ostensibly take issue with this characterisation of actors as self-exploitative dupes,

Banks points out that this notion is more nuanced than the previously common notion in critical

theory (ie: writers influenced by the Frankfurt School) of seeing "the cultural worker to be a docile

body, amenable to 'top down' management" (IBID). Rather here workers can't help but enter this

set of manipulative power relations because the environments they are set in and the tools they are

given are all inscribed with these values. Indeed, most of my interviewees demonstrated an acute

awareness of these systems but ultimately saw them as a trade-off worth taking (such as Pratchett's

comment above) in order to work in the field they desired or to gain the expertise and experience

necessary to orientate their trajectories towards more creative opportunities; because as it must be

stressed not all studios are governed in the same way or to the same degree, though there will

always be an element of such controls even in the smallest of indie microstudios.

One particularly exploitative practice endemic to the games industry is the unhealthily intense and

long working days in the weeks and months leading up to release or key milestones, often referred

to euphemistically as 'crunch' (Schreier, 2018; Vanderhoef and Curtin, 2015). Whilst stories abound

of employees working long hours in all creative industries, in the games industry such a practice is so

commonplace as to become institutionalised. Indeed, crunch is particularly insidious because it is

often accepted as an inevitable part of workplace culture, rather than as a contractual requirement.

For instance, studios in Quebec (Montreal being a key hub of the games industry) bypass legally

mandated overtime payments by presenting the overtime as voluntary, whilst implementing

structural conditions and a workplace culture that makes such overtime impossible to turn down if

one is to maintain a career in the industry (Legault and Weststar, 2015, p. 208). Although crunch is often cited as a result of poor management and planning (O`Donnell, 2014: 252), and is coming increasingly under fire from more progressive journalists who have begun covering labour issues in the industry (Klepek, 2018; Maiberg, 2017; Schreier, 2018), it has become accepted and normalised as an intrinsic part of the reality of modern game development, rather than illustrating the unsustainability of production processes as they stand. After conducting embedded, ethnographic research in a major Vancouver studio for a high-profile game release one journalist, describes the coercive practices that resulted in workers undertaking "12-hour days, six days week, for months on end" concluding that although "there's no rule that prevents developers from leaving work at 5 PM" but the fact that "everyone stayed late" is illustrative of "the macho atmosphere crunch fosters in its employees" (Maiberg, 2017).

This 'macho' atmosphere and culture of endurance is a key factor, deriving from the highly competitive and male dominated spaces of commercial videogame play (Fullerton et al., 2008), it replicates a set of attitudes and values in the equally male-dominated work space that is highly alienating to female employees, which partly explains the gender inequality of the field, where only 22 percent of workers are female (Weststar et al., 2016). Indeed long working hours, here as elsewhere, are often normalised by young male workers who have less commitments (Hesmondhalgh and Baker, 2011, p. 153). Employees themselves are often complicit in their own exploitation because, "surviving crunch is valorized and can be born as a badge of honour and a signal of being a true developer" (Weststar, 2015, p. 1244). This explicitly links the culture of crunch as a kind of initiation into the occupational community (although one that never seems to end) or as an example of one of Caldwell's 'war stories,' in which solidarity is built through a shared struggle (2008a, p. 51).[105] A subcategory of the war story, which couches production in the emotionally

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[105] The games journalism outlet *Ars Technica* runs a regular YouTube series named 'War Stories,' which true to Caldwell's definition explores controversies or moments of struggle in the history of gaming. It shows just how

evocative language of agonistic struggle, is the 'against-all-odds,' which emphasises the kind of heroic self-actualisation in the face of adversity that McRobbie (2016) sees as a driving force behind the rhetoric of entrepreneurialism. For Caldwell this form of trade story is designed to "promote character traits idealised for the exploitable Hollywood system, such as tenacity, resourcefulness and frugality" (2008a, p. 40). The reason such narratives resonate so strongly in game development as an occupational community is linked to the notion that gamers notoriously value competition and the struggle over adversity in videogame experiences (Juul, 2013), leading to the notion that in gamer communities as in the production communities that often emulate them, the "sense that to truly belong is to have such a story to share" (Weststar, 2015, p. 1244). Developers are thus quickly socialised within the macho, competitive and high-pressure crucible of the game studio to adapt to such processes, or they are winnowed out in short order.

According to Banks, being a flexible worker in the cultural industries results in a subjugation of self to the needs of the company (2007, p. 36), and this is particularly true within the occupational community of game workers, where the intensity of much games industry work consequently leads to high rates of burnout. Whilst this is consistent with the flux that theorists find to be the default state of the creative industries broadly (Hesmondhalgh and Baker, 2011, p. 136) and other sectors undoubtedly also see "substantial outflow in mid-career" (Tunstall, 2001, p. 5), the problem of burn-out in the games industry is particularly acute, with O'Donnell suggesting the average length of employment in the games industry is as little as five years (2014, p. 148). As a result of these factors the industry is required to be highly flexible and nomadic, with large swathes of workers migrating from studio to studio, often across national borders, after projects end or studios unceremoniously shutter (Makar, 2018).

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much the somewhat militarised language of struggle and conflict has entered the cultural imaginary of the industry.

This international form of churn, a counterpart to the industry's heavy dependency on outsourcing labour, reinforces Witherforde and De Peuter's assessment of the games industry as the defining industry of globalised informational capitalism, but it also echoes the predominant structure of open-world videogames, which sees the protagonist wandering endlessly across the map in search of quests. Whilst labour in the gig economy of freelance and project based work, a structure common in the creative industries, is often spun by neoliberal managers and policy makers as offering advantages of flexibility and independence to the worker (Edwards and Wajcman, 2005, p. 28), it also ensures that the executives maintain their hold over intellectual property and can save money paying for the kind of benefits and protections a permanent employee might require. It seems that in the gig economy, the advantages of the lauded 'flexibility' of such labour are almost exclusively enjoyed by the corporation.

Even my own small sample of interviewees reinforced these trends. During writing this PhD one of my interviewees, Catherine Woolley, moved from Creative Assembly, a large studio owned by major publisher Sega, to the independent studio The Chinese Room, another studio I had interviewed with, ultimately illustrating that despite its growth the core network of the games industry is still a tight-knit world. But within months of this move The Chinese Room shuttered temporarily due to personal issues of the founders Dan Pinchbeck and Jessica Curry, who wrestled with the pressures of running a growing indie studio (Batchelor, 2017). The studio was later acquired by Sumo Group, an entity that bills itself as "one of the largest providers of creative and development services to the video games and entertainment industries" with Pinchbeck installed as creative director (Sumo Group Plc, 2018). Meanwhile Woolley was hired by another British independent developer, Media Molecule where she currently remains (Woolley, 2018). Another interviewee Sean Vanaman, one of the founders of indie studio Campo Santo, migrated from the studio Telltale before it dramatically shuttered in 2018, but whilst working on their second game Campo Santo were acquired by Valve, owners of the biggest digital platform Steam (Alexander, 2018).

Sean Vanaman, one of the founders of Campo Santo, tells me that the studio was built on this very

principle of flexibility, and that despite its close knit creative culture (many of its members go back

years as collaborators on *The Walking Dead* series at Telltale games and have a shared background

in the *Idle Thumbs* podcast network), was specifically founded with flexibility in mind: "the way we

structured the studio was to be able to not carry a giant staff always" [SV2]. This is consistent with

dominant industry trends towards highly flexible workforces and project based short-term contracts.

Such 'flexibility' is called 'precarity' by political economists and regularly characterised as the moral

low point of the knowledge economy (Banks, McRobbie), but for Vanaman, who is no doubt used to

such arrangements as a fact of life, it is seen as just an unavoidable reality of working within the

industry. There is an attempt here with Campo Santo to turn this into a positive by stressing how this

accommodates the changing motivations and desires of their mobile work force where people want

to "mix things up a little bit" and "go work on other stuff and come back" [SV2], though its uncertain

whether being bought by a much larger studio had been a desired outcome and ultimately indicates

that retaining independence is difficult even with a critically and commercially successful game

under your belt.

This flexibility can clearly be linked to the idea of subjectivity under neoliberal ideology, which

stresses the importance for adaptation of the self through a spirit of flexibility and a continual

process of self-improvement, in order to fit the rapidly changing landscape of postmodern and

globalised labour markets (McRobbie, 2016). In particular, the form of flexibility discussed here by

Vanaman, brings to mind the notion of the 'portfolio career' discussed by a range of management

authors and neoliberal pundits[106] as a space where "employees might be free to achieve self-

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[106] In their overview of management literature Boltanski and Chiapello position the origin of this idea with
Charles Handy's book *The Age of Unreason*, and cite the management consultant Bob Aubrey, who lists five
categories of the portfolio career (and their renumeration) in which "everyone manages for themselves":

realisation away from the confining spaces of the organisation" (Hesmondhalgh and Baker, 2011, p. 140). The subjects of such portfolio careers are described by John Hartley as:

> self-employed, freelance or casualized, project-based, part-time, working in teams with multiple partners who change over time. They need to understand an international environment with changing cultural, technical, and business imperatives, where continuing education is necessary, project management a core skill, and their own ''life design'' an increasing priority. (Hartley, 2004, p. 25)

But the neoliberal economists who have historically praised the project based structure of the portfolio career as liberating for creative individuality are often less vocal about the true benefits being granted the corporation who remains efficiently lean and profitable through such strategies. Indeed, due to the highly flexible demands of the games industry mobility between projects is common and creative workers move from project to project less often due to the vaunted qualities of freedom and self-determination of Florida's creative class, and more often as a result of larger changes in their environment that they have little control over – including closures, buy-outs, mergers, processes of rationalisation and down-sizing, or just the general tendency for game studios to expand and contract in size between projects to remain competitive and profitable in a volatile market environment.

Between the exploitative practices of corporate structure in the new spirit of capitalism and the supposed freedom afforded creatives to follow their dreams in creative cities is a gap that is

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"waged work, remunerated in line with the time spent on it; work for oneself, remunerated by the results obtained; domestic work, performed for the upkeep and maintenance of a home; voluntary work, performed for charitable organizations, the community, friends, family, or neighbours; educational work, which makes it possible to learn, to develop skills, to read, and to educate oneself." (Bob Aubrey cited in Boltanski and Chiapello, 2007, p. 110)

increasingly being occupied by new types of studio like Campo Santo pragmatically negotiation between financial feasibility and an attempt to instil qualities of the 'humane workplace' that Andrew Ross (2004) famously exposed in his book *No Collar*. It is hard to condemn practitioners like Vanaman, however, in striving to find new opportunities in a volatile industry for replicating some of the very precarious and flexible industry practices and structures that have been elsewhere been defined as problematic. Such a duality between self-realisation and security, is much evident in the rhetoric used by such figures as they attempt to negotiate the rapidly shifting realities of the new economy. A case in point is that of Rhianna Pratchett, whose decision to work as an externally contracted free-lancer allows her to exchange "power for freedom" in that she has the latitude to take on projects of her choice, but as a result of her distance to the project doesn't have the "power that I would have if I was on site to kind of guide things on a day to day basis" [RPR7].[107]

Boltanski and Chiapello use the model of the city metaphorically to explain the connected system of 'justice' and 'justification' capitalism uses at a particular stage of its development to maintain itself. In a prior work Boltanski along with Laurent Thevenot (2006) had aligned stages of capitalism with six imaginary cities to better describe the system of governance, laws and civics that supported them.[108] For them the new third spirit of capitalism (following the first spirit that depended upon the justifications of the civic and industrial cities and coincides with early market capitalism, and the second being based on the "compromise between domestic and commercial" and coincides with the post war boom in consumer culture and the multinational corporation), being embedded in a new highly networked and globalised world, and with a new emphasis on knowledge and cognition

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[107] Indeed, on Tomb Raider Pratchett only met with the team in person during "four or five visits that were between one and two weeks long" [RPR6].

[108] Although it is immaterial to my argument here, for the sake of completeness the six prior cities are: the 'inspirational city' based on the high status of the saint or artist who achieves a state of "grace" or "inspiration"; the 'domestic city' in which status depend on "a chain of personal dependencies"; the 'reputational city' in which status "depends exclusively on the opinion of others"; the 'civic city' in which the 'great man' is "representative of a collective whose general will he expresses"; the 'commercial city' in which the great man is the CEO who "passes the market test" by providing "desirable commodities"; and the 'industrial city' in which status is aligned to "efficiency". (Boltanski and Chiapello, 2007, pp. 23–24)

requires a new form of justification/justice and a new conception of the city to support it: the 'projective city' (Boltanski and Chiapello, 2007, p. 92). The portfolio career as an ideal is linked to this neoliberal justification, based as it is on a "flexible world, composed of multiple projects conducted by autonomous persons" (2007, p. 92).

In the projective city workers both move through a series of projects (thus aligning very well to the notion of the trajectory) and simultaneously must make of themselves a project, the kind of branded identity that Angela McRobbie critiques in Be Creative and is described here by Chiapello and Boltanski:

> Henceforth people will not make a career, but will pass from one project to another, their success on a given project allowing them access to different, more interesting projects. Since each project is the occasion for many encounters, it offers an opportunity to get oneself appreciated by others, and thus the chance of being called upon for some other project. Being by definition different, novel, innovatory, each project presents itself as an opportunity to learn and to develop one's skills, which are so many assets for finding other engagements. (Boltanski and Chiapello, 2007, p. 93)

The model of the projective city put forth by Boltanski and Chiapello stresses the intensity of projects as the engine that sustains the creative economy because "If the moment of the transition from one project to another constitutes the test par excellence" then it follows that "the shorter, the more numerous, and the more changeable projects are" then the more "just" the system is seen to be (where justice, of course, refers to justification). Whilst the modern world of the monolithic corporation relied upon the stability of the job for life, supported by the welfare state and leading to a tidy pension, in the postmodern world of globalised, flexible capitalism workers are appreciated more for their breadth of contacts (meticulously recorded by the resume) "for in the logic of this

world, existence itself is a relational attribute: every entity, and human persons by the same token as the rest, exists to a greater or lesser extent depending upon the number and value of the connections that pass via it" (Boltanski and Chiapello, 2007, pp. 125–126).[109]

Such an unstable, insecure and migratory industry surely puts paid to the notion that game design is afforded ample time and resources. Indeed, evidence of the pervasive nature of crunch demonstrates that lack of time and resources is a systemic reality, built into the production cycle as an expectation. Rather than being given sufficient resources to perform tasks to the best of their abilities, game developers often find themselves instrumentally used as resources or components in a game they have no control over, indicative of the alienation from the very creative processes that game developers are drawn to (Hesmondhalgh and Baker, 2011, p. 29).

THE MYTH OF CREATIVE FREEDOM: AUTONOMY, RISK AND UNIONS

O'Donnell's myth of creative freedom ("you get to make the games you want") aligns itself quite well to liberal democratic policy statements such as those of Florida that trumpet the self-actualisation and emancipatory nature of creative work, which "attempts to elude the strictures of organizational conformity" (Florida, 2014, p. 17). The broad church of creativity and the (middle)class of people able to wield it, in Florida's rhetoric, become a fix-all salve that can be applied to all of society's ills, the ultimate aim of which seems to be to create a new utopian society defined by an extreme neoliberal individualism that undercuts class consciousness – or what Florida dismissively terms "the

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[109] This relational network of contacts differs from the notion of reputation in the older 'reputational city', because the processes by which these networks form are not transparent – rather the very nature of the network depends on a dispersed nature of links (as opposed to a politician's opinion poll) that results in the need for an individual to make a good impression and linger in the memory (and contact book) of the right people at the right time. In a manner this is a return to the ideal of the nepotistic 'domestic city', but instead of basing the links on blood they are based instead on loyalty.

social categories we have imposed on ourselves" (Ibid., p. 7).[110] This political project is much evident in passages in which a neoliberal individualism based on a dubious meritocracy (Littler, 2017) is proposed to replace a traditional class politics that stresses collective identities and solidarity:

> The only way forward is to make all jobs creative jobs, infusing service work, manufacturing work, farming, and every other form of human endeavor with creativity and human potential… the Creative Class is a highly individualized and even atomized social stratum. (Florida, 2014, p. xiv)

On top of the issues of churn and competitive individualism noted above, this tendency in the creative industries for workers to internalise such a rhetoric of extreme individualism is another blocker for unionisation efforts, and is only intensified in the game industry by the fact that games workers (and particularly programmers) share a fundamental belief in the myth of meritocracy that underpins the tech industry (Barbrook and Cameron, 1996; Paul, 2018). It's clear that Florida's notions overlap with the qualities Weststar has found embodied in games workers occupational community, with its emphasis on exclusivity, individuality and creativity, whilst also paying lip-service to positive values of diversity and innovation.

Because nothing is certain in the turbulent world of the cultural industries, where the product is subject to a variety of subjective factors including shifting societal tastes, making 'sure bets' includes a process known as formatting, where rigidly defined uses of genre conventions, famous artists and familiar intellectual property (IP) is an attempt to impose some order onto the chaos of artistic production (Hesmondhalgh, 2013, pp. 27–32). According to some critics, such practices "[threaten]

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[110] Indeed there is a link here to prominent neoliberal theorist Francis Fukuyama's famous treatise *The End of History and the Last Man* (2012), where the fall of the Soviet bloc leads him to famously declare the end of ideological struggle and the victory of neoliberal free-market economics as the ultimate evolution of capitalism.

to overwhelm innovative and independent craft production, primarily as firms look to produce more standardized and formatted goods, in established styles and genres, which minimize risk and guarantee profits" (Banks, 2007, pp. 31–32). Such formatting also occurs in the production context as a means of placing limits on the flow of ideas in the potentially free-wheeling creative process. As Sean Vanaman observes, the iterative nature of the collaborative feedback loop could run forever, so there is a need to commit to decisions:

> You can only ship one thing and its funny to me to think how much of Firewatch was a by-product of, "well we talked about it for a day and then we went in this direction because we needed to move on." [SV39]

Paradoxically there is a need to close down the possibility space made possible by the iterative cycles of the collaborative network and such closure provides a productive constraint on the creative process (productive because it ensures something is produced, rather than getting stuck in iterative loops of ideation).

Salen and Zimmerman describe the space of possibility (commonly referred to as possibility space) as the "space of future action implied by a game design", which includes "the space of all possible actions that might take place in a game, the space of all possible meanings which can emerge from a game design" (2003, p. 67). Crucially it allows for the conceptual coupling of design and play, which is important because one of the fundamental uncertainties in game development arises from the fact that designers can not directly affect player experience, they must do so indirectly through building mechanics and virtual environment – in short by structuring the possibility space through design. Indeed this is a well-known problem for developers and is echoed by two comments in my corpus: firstly Dan Pinchbeck's notion that an imperfect contract exists between the designer and the player [DP45] and Steve Gaynor's assertion that games are "all a mediated communication from

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the person who arranged the rules and the content to the person who is activating them by interacting with them" [SG25]. The possibility space is therefore a feature of game production as well as gameplay. Indeed, this can be seen in the popular design methodology *Mechanics, Dynamics, Aesthetics* (MDA - Hunicke et al., 2004), in which the possibility space between player and designer is imagined as an indirect dialogue between the designer, who wishes to communicate something with the player but can only do so by filling the space of the game artifact with rules and props (mechanics) that can be combined into systems (dynamics) and ultimately used expressively by the player to create emotion (aesthetics).

I mentioned above that in hermeneutic theory all interpretation is a form of translation from one context to another, which is an idea that is embedded in the MDA framework. According to Iser the hermeneutic circle comes into play to replace an authority that was once present to offer guarantees of meaning, for instance the crisis of representation in modernism led to an evacuation of reason or religion as a means of grounding the self in history (Lewis, 2007). As Iser states "the hermeneutic circle points to the fact that the vanished authority has left behind a blank that unmistakably separates the text from its interpretation" (Iser, 2001, p. 54). So if the aim of the MDA framework is to allow designers to understand the player, and thus design a more fulfilling experience by working back and forth between the stages of mechanics, dynamic and aesthetics, then this circular motion is utterly in accord with the model of the hermeneutic circle which "is employed to interrelate the explicit with the implicit, the hidden with the revealed, and the latent with the manifest" (Iser, 2001, p. 8).

What is important here is not whether the authors of the MDA framework were aware of hermeneutics as an intellectual frame (indeed according to hermeneutic theory all acts of interpretation are in effect participations in hermeneutics as a method whether knowingly or not),

but that the fit between their model and an age old model of interpretive enquiry illustrates that

game designers are just the latest in a long line to employ such self-reflective methods to attempt to

understand their discipline. The possibility space, that lies between player and designer and is

implied in the MDA framework, can thus be thought of as a game specific way of conceiving the

liminal space of the interpretive gap – game specific, because it is understood as processual and

interactive. After all, Iser (2001, p. 7) maintains that the hermeneutic act is always 'genrebound' in

the sense that it must be adapted in each case to the format of the thing being translated. Whether

the thing in question is the past in history, the self in psychoanalysis, entropy in cybernetics, or the

player experience in game design a different form of the hermeneutic circle is necessary to address

the unique gap that opens up in the act of interpretation. The MDA framework, therefore, can be

understood as a potent act of games industry theorising that attempts to create a model of the

hermeneutic circle, based on principles of iterative design that constantly works back and forth

between the interests of the designer (expressed through mechanics) and the interests of the player

(expressed in aesthetics).

The possibility space opened up in game production can be very large (a bigger world, a bigger story,

and more mechanics resulting in increasingly complex and emergent systems) but is fundamentally

resource bound. This is alluded to by Vanaman above and more explicitly by Pinchbeck, who is

disappointed with the lack of "low level interactivity" in *Everybody's Gone to the Rapture*, admitting

that many intended systems were removed or not developed, "because the moment you start

playing with physics … suddenly you add a year to development" because there are "five or six

thousand props in the whole game" [DP18]. Vision therefore must intervene to arrest the iterative

processes that threatens the financial stability of the studio**.** This vision can be very overt, like the

idea of the director in auteur theory drawing together all aspects of development, as in Dan

Pinchbeck's claim that "I mainly worked at the centre of the team holding the different parts

together and kind of supplying the vision" [DP5]; or it can be a much looser shared creative vision,

more like a touch stone, such as Supergiant founders Greg Kasavin and Amir Rao's shared

educational background in American Literature and a love for Cormac McCarthy's southern gothic

minimalism as "a common ground for what could be a tonal starting point" [GK18]. Big or small,

diffuse or focused, this kind of vision is required to keep a project on course because often, and

especially for small teams, a lot is riding on the game's success in terms of financial security and

reputation. Indeed reputation, is almost as important as money in that it can be reinvested in future

projects, and the game industry places so much weight on applicants having shipped a game

successfully (O`Donnell, 2014, p. 38) that not having that accolade on a CV put a developer at a

significant disadvantage.

But conformity through formatting of products and processes is only one side of the equation and,

as management theorists and business writers constantly remind us, corporations also must

embrace change through innovation if they which to stay relevant in a crowded market (Cadin and

Guérin, 2006; Czarnota, 2017; De Prato et al., 2010; Jahn-Sudmann, 2008; Readman and Grantham,

2006). Loïc Cadin and Francis Guerin, writing in the European Management Journal, summarise this

dilemma between innovation and control:

> Any organisation that intends to innovate and benefit from its innovations by exploiting
>
> them has a dilemma to solve since it has to act organically if it wants to stimulate innovation
>
> in an efficient manner (exploration phase). Yet it must also act mechanistically so as to be
>
> able to make an effective use of its innovations (exploitation phase). Furthermore, the
>
> organisational principle itself means establishing an order to achieve reproducible practices
>
> and minimise uncertainty. (2006, p. 249)

For Banks there is a creativity/commerciality dialectic at the heart of the cultural industries, indeed,

such an uneasy balance of these seemingly intractable forces is seen to be "*the* distinctive feature of

cultural production" (Banks, 2007, p. 30), since the very products it makes possess a 'double articulation' as both artistic good and commercial product.

In fact, such reflection on the larger structuring factors of the industry was a rich source of discussion in all my interviews, especially those who work or have worked in AAA [CG34; DP58; ES32; GK27.1; RPR5; SG17]. My subjects all, directly or implicitly, discussed their creative practices alongside wider structural issues, as well as reflecting on material constraints to their creativity in the form of time and resource limitations, demonstrating a clear-eyed view of how their creative practice is deeply entwined with broader practices and wider socio-political structures. For instance, Emily Short, an independent developer, writer and pioneer of the field of Interactive Fiction discussed the various constraints that come into play in a commercial setting:

> If you're working in a commercial context it's very hard to do [iterative writing] and often the schedule is about, 'OK we're doing you know a vertical slice is here and then this is locked and we've got VO [voice over] for it and God forbid you should want to change it because we'd paid good money.' [ES31]

Meanwhile Sean Vanaman, heading up a project at an indie micro-studio of around half a dozen employees faced with tight resources, emphasised the importance of operating within a strict schedule out of financial necessity:

> The way we make game is… and this is like a financial thing… is we go, OK guys we have 22 months and then that's when the game's got to come out because… that's when the money runs out and if we borrow any more money to make this game it is not going to be a smart business decision. [SV38]

To my mind such reflexivity and awareness of industrial structures at the very least shows that such workers rarely fit the image of the creative labourer as uncritically duped into willing self-exploitation as put forth in some critical models of creative work (Banks, 2007, p. 11), which is especially true when this awareness of larger structures is coupled with a stated desire to push back against them, as one of my interviewees aimed to do with his studio's unconventional approach to storytelling on mobile devices: "right around 2011 it was a very radical idea we were pushing for. By just saying that players and consumers with iPads and iPhones would want to play anything with narrative on it" [RP32].

It is not inconsistent, therefore, to suggest that although creative workers undoubtedly strive towards these self-realising ideals, thus leading us to perhaps reject the notion that they should be considered merely passive dupes (O`Donnell, 2014, p. 158), we must also note that industrial structures are geared towards exploiting the creative worker's personal enthusiasm for commercial ends (Weststar, 2015). Significant here is that Hesmondhalgh and Barker's empirical research leads them to conclude that creative workers often possess a highly ambivalent view of creative work and their own industry status (2011, p. 137), fluctuating between both the negative and positive aspects of their position. The industry is perceived not to be some homogenous behemoth but extremely striated, with different expectations for the kinds of work that can be performed and the kind of personal freedoms that can be attained at any given studio. Workers can exert a degree of agency within such a structure, utilising their skills and personal development to find a surer or more fulfilling foothold in the industry, though never fully escaping its reach or boundaries. Equally whilst the industry has been described by some as a "perpetual innovation economy" (Kline et al., 2003, p. 66), the actual quality of the ideas it generates can vary drastically in different moments and sectors of the industry based on a variety of constraining factors.

Hesmondhalgh and Baker acknowledge and discuss the role of 'creative managers' as embodying the important functional role of reconciling the conflicting the forces of creativity and commerce that characterise the cultural industries. In large companies, creative managers occupy positions between the high-level studio or publisher executives whose loyalty is to the shareholders or CEO and the bulk of the creative workers exercising their skill in crafting the product. They act as valves, regulating the flow of creative energy on the one hand and resources on the other, attempting to balancing the seemingly impossible dialectic of commerciality and creativity: "Mangers need to reconcile artistic values with economics; novelty with familiarity; existing demand with transformation of the market; vertical integration with outsourcing; and systems with individual aspiration." (Hesmondhalgh and Baker, 2011: 82) One of my interviewees, with experience working in the AAA studio Yager, discussed his former role in production in such intermediary terms:

> My role was as a producer on the publishing side, so I was like kind of the liaison between the publisher and the developer and I worked very closely with the writers on the team and was involved in like some of the voice recording and even contributed some aspects of writing and stuff like that. [GK12]

Managers not only exist between class structures (not quite dominated class, not quite dominating, as per Bourdieu's definition) but as a complicated nexus between several seemingly unresolvable dialectics like that of creativity and commerce. Their role is primarily an attempt to use so called soft skills of communication and diplomacy to smooth the route between these two forces:

> But creative management is unlike the top down, inflexible supervision found in many other industries. ... [It] cannot be reduced to set rules or procedures. So this 'soft' but nevertheless rationalising creative management is always struggling against the relative autonomy given to creative workers, especially for 'star' creators, which further fuels the a-rationality of the

creative process. For capitalists, creative workers represent an investment in variable capital that consistently threatens to undermine profitability. (Hesmondhalgh and Baker, 2011, p. 84)

In the case of narrative directors, we might also add the dialectic the needs of the story (as expressed by the writers) and the needs of gameplay (as expressed by technical aspects of game design and pressures of the market/audience). Given that a strong tension exists in game design between artists who design the aesthetic shell of the game and programmers who code the game's core, specific roles have emerged to bridge the gap between specific teams. The narrative director is one of several emerging interstitial roles in the games industry who help to grease the wheels of an increasingly multidisciplinary team. Technical artist and tool programmers are two such roles that O'Donnell observes as unique to videogames, having emerged as a response to the need to increase inter-deprtmental collaboration in growing team sizes; the former acting as a go between reflecting the interests of coders and artists which are often seen at odds and the latter a programmer tasked with making tools to allow the art team to work without needing to access the code base directly (O`Donnell, 2014, p. 88). Since any narrative additions are likely to create a good deal of labour for the programmers and artists, for instance developing 3D assets and cutscenes, part of the narrative director's role is to constrain the narrative ambition of the writers to match the resources available. The narrative director thus occupies such a creative managerial role balancing creativity and commerciality.

For the individuals I interviewed in such roles, a balance had to be struck between management and creativity, and this was especially true in small studios where divisions between roles are less acute and people typically multitask, taking on some of the responsibilities undertaken by a layer of

management in larger studios.[111] Creative managers operate as distinct interstitial roles (e.g.: tool programmers, technical artists and narrative directors) in large studios, bridging two or more departments, but in indie microstudios such roles are typically taken on by the founding directors themselves. Because of the sense of non-hierarchical comradery such studios attempt to enact, the term creative management is rarely used, but instead it is said that the individuals have vision. In order for a creative vision to arrest and redirect the processes of iteration that occur in a collaborative network, a completely flattened hierarchy is insufficient; someone will need to step in and decide (thus instantiating a hierarchical relation).

Indie studios in particular are often headed by such visionaries who are, like cinematic auteurs, associated strongly in the press and fandom with the end product. These visionaries, for lack of a better term, are often the founders of the studio and often come from a celebrated career in the AAA games industry or adjacent fields[112]. In my study Ryan Payton (formerly a producer at Microsoft and Konami), Sean Vanaman (formerly lead writer on The Walking Dead at Telltale Games), Steve Gaynor (formerly lead designer for Bioshock: Minerva's Den at Irrational Games) and Greg Kasavin (formerly a producer on Spec Ops: The Line at Yager and an editor at Gamespot) fall into this category. Others emerge as leading figures in their communities through their perseverance as independent developers like Emily Short (an important figure in the Interactive Fiction community), Dave Gilbert (founder of Wadjeteye games who are seen to be at the heart of the renaissance of the point and click adventure genre) and Lucas Pope (whose highly experimental games placed him at the centre of the early indie explosion).

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[111] Despite being dubbed as head writer of Failbetter, Chris Gardiner's role encompasses responsibilities that concern the general running of the studio including "responsible for deciding what gets written and to keep everything to the quality standards of **Fallen London** and contracting freelancers and steering what goes into **Fallen London** and **Zubmariner" [CG2].**

[112] Another good example of this is Josef Fares, who crossed over from a successful career as a filmmaker to head up two critically acclaimed indie projects for Starbreeze Studios, Brothers: A Tale of Two Sons and A Way Out.

This figure of the visionary, who has the experience and insight to make final calls in the creative process thus taking on (in more positive terms) the role of creative management formatting the creative process, correlates strongly with the notion of charismatic leadership in entrepreneurial discourses. Boltanski and Chiapello note one of the problems with such a dependency on vision is its ambiguity:

> The key point in this mechanism is the leader, who is precisely the one with a capacity for vision, who knows how to communicate it and get others to support it. This is doubtless the weakest link in the new mechanisms, for everything rests on the shoulders of an exceptional being; and it is not always clear how to train or even recruit such beings, especially in sufficient numbers, since every firm needs them. (Boltanski and Chiapello, 2007, p. 76)

This ambiguity is further reinforced by the lack of a clear title for such figures. As opposed to the CEO of the modernist era, whose power and responsibilities were fairly clear, the notion of vision is invariably in flux and is sometimes even dispersed over multiple roles.

This runs somewhat counter to typical notions of creativity, as well as the notion of innovation in society in general which invariably celebrates the 'eureka' moments of individual figures like Pasteur, Einstein and Edison (and more recently Gates, Musk and Zuckerberg), which posits innovation (vision) as a fundamental quality of an individual actor (thus using vision as a noun that can be possessed rather than a processual verb). In popular conceptions of the games industry (and particularly in its surrounding journalistic apparatus) the creative core of the process is normally associated with a singular figure, typically the lead designer. This is especially true of popular histories of game development where such heroic individual abound (Bissell, 2010; DeMaria and Wilson, 2002; Harris, 2014; Kushner, 2004; Levene and Anderson, 2012; Schreier, 2017a) but is also reinforced by scholars of organisational management, as seen in the assertion from Ted Tschang

that "most new genres tend to arise from forms of game play invented by individual designers" (Tschang, 2007, p. 994).[113]

The fact that the typical notion of innovation in culture stresses the role of the individual, is a tradition which depends as much on the legacy of the idea of the creative genius derived from Romanticism (Williams, 2017) as it does the more pragmatic requirements of a singular author under capitalist notions of patent law (Foucault, 1991c). Jared Diamond critiques the role of the individual genius in his macro-historical account of innovation *Guns, Germs and Steel*, which contains myriad examples of multiple societies coming to the same innovation simultaneously, and in isolation, via a patterned development of incremental discoveries, environmental factors and sociohistoric contingencies, which has led Bogost to proclaim it a 'procedural history' much suited to game systems since it "expose[s] the underlying patterns that determine why history plays out the way it does" (Bogost, 2010, p. 134). For Diamond, as for Latour and Foucault, the individual's role in invention disguises much more complex and rich processes but persists due to the centrality of the rational individual subject within capitalist systems of value and attribution:

> Thus, the common-sense view of Invention that served as our starting point reverses the usual roles of Invention and need. it also overstates the importance of rare geniuses, such as Watt and Edison. The 'heroic theory of Invention,' as it is termed, is encouraged by patent law, because an applicant for a patent must prove the novelty of the Invention submitted. Inventors thereby have a financial incentive to denigrate or ignore previous work. (Diamond 1998: 244)

The fact that the author is important to the actors themselves, and thus needs to be taken seriously as a strong part of the network under scrutiny, is evidenced by a particularly potent form of the

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[113] Indeed Tschang cites the populist account from DeMaria and Wilson (2002) to back this point up.

auteur theory emerging in the games industry. This is a concept borrowed from a film context and

applied to myriad prominent game industry developers by the apparatus of games journalism,

publicity departments, corporate strategists and constantly evoked by gamers themselves.[114] Whilst

the initial list of auteurs in the world of videogames was fairly modest compared to that of film –

prominent examples included Shigeru Miyamoto, Hideo Kojima, and Ken Levine – the membership

of this elite group exponentially grows year on year, a fact that is enhanced by the emergence of the

indie scene, which is typically structured around personal stories or game concepts, constructed by

small teams with a significant degree of transparency.[115] The result is that there is now rarely a

studio in existence that doesn't profess to have an auteur of some description speaking on its

behalf.[116]

In film, the auteur theory developed first through the critiques of *Cahiers du Cinema* in France, and

particularly the writing of Francois Truffaut (2009), before gaining popularity in America through the

writings of Andrew Sarris (2009). To a large extent it was an attempt to elevate the director as the

key creative force in the otherwise Taylorist industrial process of Hollywood, lifting it from mass-

production in order to justify it as an artisanal medium; firstly for the benefit of the French New

Wave directors, who were pivoting from journalism to filmmaking, but also to the benefit of the

emerging discipline of film studies that had to stake its claim in academia (in much the same manner

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[114] For example, when the late and much beloved President of Nintendo, Satoru Iwata, conducted a long running series of interviews with key developers and designers entitled 'Iwata Asks' (Nintendo, 2019) he was simultaneously drawing on a longstanding tradition of such auteur led investigations as well as extending those traditions by enshrining them into official institutional processes.

[115] The documentary *Indie Game the Movie* (Swirsky and Pajot, 2012) is illustrative of this since it follows the travails of three individual creators with an openness that established PR departments would no doubt balk at.

[116] Such is Hideo Kojima's reputation following his work on the long-running Metal Gear Solid series that, for example, following his falling-out with publisher Konami, Sony's acquisition of him and their support for his new game *Death Stranding* was considered a tremendous coup, so much so that it prompted the release of a unparalleled promotional video featuring Sony Computer Entertainment CEO Andrew House introducing Hideo Kojima in person and in Japanese (Robinson, 2015). Kojima himself is very adept at building his personal brand, making enigmatic comments on Twitter, speaking at industry conferences and scribing the manifesto-like description of his new studio Kojima Productions 'from sapiens to ludens' with such aggrandising claims as, "play has been our ally since the dawn of civilisation," and, "play is the primordial basis of imagination and creation" (Kojima, 2019) – a clear nod to important game scholars like Huizinga's notion of 'Homo Ludens' (Huizinga, 2016).

game studies has), by demonstrating the immanent value of its object of study. It is hardly

surprising, then, that the image of the auteur should also start to loom large in journalistic and

critical accounts of game production at the precise historical moment when a great deal of anxiety is

circulating around whether games can be considered an art.[117]

Curiously the author is a somewhat ambivalent figure in the games industry. In spite of the way

individual practitioners are regularly called up to speak on behalf of a product by publicity agents,

whilst the vast multitude of artists, coders, support staff and outsourcers that make up the vast

teams who make the games on a day-to-day basis, are obscured behind a fetishistic veneer (Kline et

al., 2003, p. 197), I have noted a tendency in game studies to conversely largely ignore the role of

the author. Even when they are noticed, such as in Zackariasson and Wilson's study of the games

industry, they appear curiously divested of any agency. The view of these authors see the role of the

designer as subservient to the ludic and narrative logic of the game and function rather like

intermediaries through which these forces flow rather than full blown mediators:

> Developers face the challenge of making these parts work well together and providing
>
> balance in the game. If they succeed, the gamers will not notice any irregularities in the
>
> representation of the game they are playing. They will, in a sense, be one with the game and
>
> feel immersed into its world. (Zackariasson and Wilson, 2012, p. 5)

Here the developer is little more than a cog in the machine powerless to (re)define games in the face

of an inherited model; rather they merely work to assemble the components pre-ordained by a

hegemonic academic definition imposed from above, as argued by Fron et al., and/or perpetuated

by the dominant aspects of the games industry, as per Dymek's industry spiral model. Furthermore,

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[117] For evidence of this see the famous controversy surrounding comments made by former Chicago Sun Times film critic Roger Ebert on his blog (Ebert, 2010a, 2010b) and the reaction of games journalists (Stanton, 2014).

if the designers are successful their labour and their intentions will simply disappear. In ANT terms they have been reduced to intermediaries, black-boxed nodes in a network that merely pass on inputs without effecting them, rather than the more interesting (and traceable) mediators that actively "transform, translate, distort, and modify the meaning of the elements they are supposed to carry" (Latour, 2005, p. 35).

The author in this sense disappears, like in Barthes influential essay 'The Death of the Author' ([1967] 1993), which famously downplayed the role of the creator(s) in the hermeneutic process. Barthes petitioned for the notion of the author to be jettisoned from critical considerations of the text because it acted as a guarantor of the text's final and absolute meaning, and for him the death of such an 'author god' is a liberating event that results in the birth of the reader; or rather readers, because Barthes' essay suggests that there are as many readings of a text as there are readers to interpret it. This intellectual move leads us to a crippling relativism; after all, If there are as many readings as there are readers, and seemingly with nothing to distinguish one from another, then the whole critical apparatus collapses along with all the interpretive traditions of media studies.

I understands authorship more in line with Michel Foucault's notion of the 'author function' put forward in his 1969 essay 'What is an Author?' (Foucault, 1991c), which for me places such figures somewhere between the two extremes of auteurist celebrity and complete irrelevance. Although Foucault comes from a similar post-structuralist framework to Barthes,[118] his essay on authorship approaches the problem from his characteristically critical genealogical approach, which interprets ideas as overdetermined by a variety of factors played out in specific and historically contingent situations, traceable through complex discursive structures. For Foucault the author, like any

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[118] Although Barthes very much started his career a structuralist, as attested by the superb work in Mythologies (2009a), by this essay he was transitioning to post-structuralism, which was marked by the highly disruptive claim that the linguistic system of signification was no longer able to fix, except in the most ephemeral ways, the ultimate play of meanings.

discursive construct, plays a productive and material role in bringing the entity it describes into being, in much the same way ANT sees identities as circulating in networks that actors "hook up" with at specific instances to form provisional and flexible identities (Latour, 1999, pp. 18–19). The Foucauldian author may ultimately be no less a fiction than for Barthes, but remains vitally important to interpretation none-the-less, since it forms not only a social construct developed within the context of advanced capitalism to serve the legal purposes of accountability, categorisation and rationalisation, but also a crucial material limit upon the text's free play of meanings:

> The author allows a limitation of the cancerous and dangerous proliferation of significations within a world in which one is thrifty not only with one's resources and riches but also with one's discourses and their significations. The author is the principle of thrift in the proliferation of meanings. (Foucault, 1991c, p. 118)

But whilst regulatory processes like the patent system rationalise and simplify by attributing an invention to a single author, it is in practice more the expression of a complex range of actors and determining factors that go unremarked upon. Latour critiques this myth of the eureka moment that attributes innovations to a single figure, for closing-down the mediating nodes on the network because it "transforms a localised, heteregoneous, and material set of circumstances (in which social factors are clearly visible) into the sudden occurrence of a personal and abstract idea which bears no trace of its social construction" (Latour and Woolgar, 1986: 170). In this sense an idea is a kind of abstract apparatus, subsuming a number of preceding processes, every bit as much as an engine does (though on a smaller scale, for there are thousands such ideas that come to form an array like an engine).

Although my interview protocol approaches studios through individual creative practitioners, it is impossible to completely separate the individual from the larger studio in which they operate. An

argument made by Jennifer de Winter's (2015) in her exploration of Shiguro Miyamoto within the context of Nintendo.[119] O'Donnell (2012b) estimates that, depending on its scale, the average game studio consists of a mixture of roles that break down as follows: 30% programmers (responsible for developing the software engine, the framework on which the game is built), 30% art teams (responsible for developing assets in the form of 3D models or textures), 30% game designers (responsible for conceiving of high level design choices, narrative and layout) and 10% auxiliary staff (HR, production, upper management, interstitial roles). Of these O'Donnell places the onus on the designer as the key creative operator often imagined to be the kind of 'director' or 'author' of a game (O'Donnell, 2012b, p. 104). Even though games are often in reality made collectively, such a statement demonstrates how in the popular imaginary key individuals come to represent the creative driving force of the game, a fact that is exploited and reinforced in the promotion of said games; where such figures predominantly give press interviews and are named in PR materials. So, even if Authors are not *intrinsically* important figures like Barthes' totalising notion of the 'god-author' of old, or the romantic (and Romantic) notion of the auteur as creative genius as posited by auteur theory, they but are worthy of study because they are *perceived* to be important to a variety of actors

For ANT the author is not only a vital limit, but a site of convergence of a number of relational links between other important actors and can thus be seen as one of the most important sites of mediation or translation in a network at a given moment.[120] In short it is foolish to simply ignore the

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[119] Indeed, this is a rare academic monograph on an individual game creator, in contrast to the myriad such texts produced in film studies where the auteur theory still holds some clout, illustrating that in spite of the extreme visibility of auteur's in the sphere of games journalism, there is comparatively much less interest in them in the academic field of game studies.

[120] Of course, the key role of authorship can be dispersed over multiple sites, can shift from site to site, or can even be held by a corporation. For instance, after it was revealed that Palmer Luckey, who had always been heralded as the genius inventor of the VR hardware Oculus Rift, was a member of an Alt-right hate group who had helped bankroll Trump into power, the corporate owners of the technology, Facebook, made concerted efforts to sideline Luckey and consolidate authorship with the company. Such was the extent of the fallout of this scandal that it made its way into a senate hearing and prompted *Time* magazine to fill in the larger public on just who Palmer Luckey was as the event moved from a niche tech story to one of mainstream import (Fitzpatrick, 2018).

author because of an idealistic belief that they are no longer relevant. Of course, an author can

never be coterminous with its ultimate meaning or, indeed, its modes of production, but serves to

create one of the conditions for the play of significations within a relational framework. The author

is always somewhere and never completely disappears into the relativistic plenitude of Barthes'

utopia of readers. This is an essential property of actor-network theory, as it understands the author

as product of the network, a structure which stands in for and materialises Foucault's wider concept

of discursive fields. For Foucault (as well as ANT) this is, "a matter of depriving the subject (or its

substitute) of its role as an originator, and of analysing the subject as a variable and complex

function of discourse" (Foucault, 1991c, p. 188). As argued by some Latour and Foucault make a

powerful double-act here, where the spatiality of Latourian networks complements the Foucauldian

approach to historicity: "the power and flexibility of an analysis that puts Latour's emphasis on

heterogeneous networks together with Foucault's insistence on the historically conditioned

emergence of such networks" (Kendall and Michael, 2001). actor-network theory puts Foucauldian

discursivity into practice within an anthropological framework, and to my mind provides one of the

best toolsets we have for analysing material links between things, whilst maintaining the important

post-structuralist insight that those very things may be provisional and ever shifting.

Ultimately, it may be best to think of vision in terms of a resource spread through the network that

is concentrated in different roles at different times. In an essay refining clarifying some aspects of

ANT in light of the growth of popularity of the model of the network[121] Bruno Latour discusses the

notion of agency as an entity that can be thought of separately to the human actors:

> actantiality is not what an actor does—with its consequence for the demiurgic version of
>
> ANT—but what provides actants with their actions, with their subjectivity, with their

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[121] Here Latour rather justifiably complains that the popular use of the term network suggests "transport without deformation, an instantaneous, unmediated access to every piece of information", whilst he was using it in Deleuze and Guattari's sense of being about "a series of transformations" (Latour, 1999, p. 15).

intentionality, with their morality. When you hook up with this circulating entity, then you

are partially provided with consciousness, subjectivity, actoriality, etc. (Latour, 1999, p. 18)

Just as the status of agency is bequeathed to an actor through a hook up within the network, we might say that abstract (but very influential) qualities like 'vision' likewise circulate within networks and are subscribed to by key actors (be that a studio lead, creative director, narrative designer) at key moments in the process.

In the previous chapter I showed how the presence of a creative vision is a crucial ingredient to off set the play of ideas in the collaborative network. When a vision is particularly strong it doesn't just guide the creative process but aggregates all of the elements of the studio, directing all the separate creative trajectories in the same direction, like a magnet working upon iron filings. Therefore, despite the proposed flattened hierarchies of small studios (as critiqued by Andrew Ross in his book No Collar), it is typically the core founders of the microstudio who ultimately call the shots as they have often invested the most in terms of energy, reputation and money into the enterprise. But creativity is not only constrained by individuals but by non-human actors in various forms: documentation that formalises vision, software that directs the flow of ideas, and processes that organise the workspace. Vision is not just a trait of individuals but something that is maintained in the processes which regulate game development and one example of this is the way individual vision becomes crystalised in the kinds documentation explored in the previous chapter. The presence of such gatekeepers demonstrates that large studios can never entirely achieve totally flattened hierarchies idealised in agile management texts, nor would it be desirable to do so since there would be little to arrest the flow of ideas. Creative vision, which suggests a degree of creative freedom and risk, should always be seen with its counterpart creative division, for instance in the way documentation and software apparatuses are used to discipline and constrain creativity.

Such documents are particularly good at stabilising abstract concepts into concrete forms and can even help to pin down the allusive notion of vision. For instance, according to Dion Lay "if you're working from the same pillars[122] you're going to have a shared vision as well" [DL11]. Such a coherence of vision translated via forms and processes also goes some way towards bridging the gap between gameplay and narrative tensions because it means everyone is working towards the same ends. If the creative vision is successfully communicated it helps to reinforce and maintain the shared production culture discussed above, effectively detaching it from the key figure (or figures) guiding the process and embedding it in the entire process. This gives the feeling of a common goal which energises the most successful creative endeavours, as observed by Lay when he comments that "no one had to be handheld. The art was just straight there, everyone got the feeling of it" [DL25].

This is the dream of creative management because it maximises the potential of the project and its efficiencies without the need for major intervention at the point of input or quality control at the point of output. The creative pillars, then, are a form of institutionalisation of the vision of the studio's leads into a kind of easily communicable mantra, and are a key vector for organising the competing interests of the different departments into the overarching interests of the studio, thus stabilising its sociogram and providing structure through a circulating discourse. In a sense they serve a similar purpose to Caldwell's trade rituals, which utilise repetition in order to recentre ideological processes in shared physical spaces (2008a, p. 80).

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[122] Pillars, the key points that hold up a much larger structure, are a common metaphor for discussing core ideas in design documents. In the case of Alien: Isolation Lay informs me these were 1) a horror experience, 2) drawing heavily on the original Alien film, 3) set on a deserted space station [DL11], but it is also apparent that the pillars might be different for different disciplines or stages of the project. For instance, in an interview with PCGamesN, the lead designer Jude Bond mentions improvisation as a key pillar directing the gameplay and how this is afforded by the crafting system (Hogarty, 2014).

The design document, and other forms of documentation like it, is one such essential element in production, binding together the large production teams into a coherent vision (or rather delegating the original visions that might have been in the heads of the project leads into paper worlds). It constitutes a non-human actor that exerts much agency in the process, crystallising a set of guiding principles and assumptions into an actionable, enforceable and replicable immutable mobile that constitutes what might be called a mechanism of control. Such documents do not just regulate the flow of narrative and ludic elements, fusing them in the game text, but also attempt to standardise the studio wide production environments (policies including explicit statements of the studio's production culture, compliance documents), or steer individual projects (design documents or a narrative bible that lay out the core principles of the design and its story), thus placing limits on the unpredictability of creative systems. In that sense non-human actors like design documents can also fulfil the role of creative management.

One of the core costs of commercial videogame development are the larger open-world environments such games demand, which need to be filled with ever higher resolution textures and assets (Ip, 2008, p. 207).[123] As each new console generation carries with it an implicit promise to bigger, more immersive experiences (Dymek, 2012), developers respond by pouring more money in asset generation with team sizes now pushing 1000 workers for the largest games (Makuch, 2013), due in no small part to this ballooning need for content and the increasing amounts of skilled artists required to produce it. Although specialist middleware solutions like *SpeedTree* (third party software that procedurally generates foliage) and techniques like photogrammetry (the mapping of high

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[123] Although discovering the true cost of games is difficult due to their being a closely guarded secret, a well-known Kotaku (Superannuation, 2014) post has collected 111 budgets between 1982-2014, showing a clear upwards trend. Meanwhile industry veteran Raph Koster (2018) has written extensively on the topic, and estimates that AAA games have increased 10 times in each of the last two decades, a factor that he partially puts down to increased marketing costs (its not uncommon for the marketing to be as much as three times the total cost of game production) but also increased texture sizes (in a decade rising from a single 256×256 texture to several overlapping 4096×4096 textures). This results in the need for more salaried artists spending longer on each asset. With AAA games prices pretty static over the last two decades, players are now paying significantly less per byte, leading publishers to look for new revenue streams.

resolution textures from photographic arrays onto 3D models) have arisen to meet these new

demands – indeed their existence are symptomatic of the drive towards open-worlds in gaming –

asset generation remains a huge financial burden. The importance gamers place on graphical

prowess in the commercial AAA space means that such corners cannot be easily cut (Ip, 2008, p.

203), so publishers off-set the growing risk of commercial game development be making increasingly

sure bets in the form of proven commercial formulas. Although this is a notion familiar within other

cultural industries where in a typical music publisher or film distributor, "costs are spread… across a

catalogue or repertoire, so that the very few hits cancel out the many misses" (Hesmondhalgh and

Baker, 2011, p. 57), here few publishers can field the skyrocketing resources needed to run more

than a handful of large-scale projects simultaneously, so the portfolios become even more

constrained. For instance, between 2015-2019 Bethesda announced a total of 19 new titles at their

E3 press conferences, 22 of which contain prominent shooter mechanics and 15 of which are

specifically first-person shooters.[124]

Although such statistics clearly allow me to make the claim that the FPS is the key mechanical

genre[125] of the AAA industry, developed throughout the last two decades as the core activity of

skilful play in increasingly male dominated mainstream game audiences (Dyer-Witheford and de

Peuter, 2009; Lukas, 2009; A. Phillips, 2015; Voorhees et al., 2012), this is only half the story. In an

article analysing the various layers of convergence in the games industry, Barry Ip notes that on that

in addition to the convergence of functions at the level of technology as consoles increasingly

become multi-media platforms, a similar convergence is occurring on the level of content, where "in

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[124] These are *DOOM, Dishonoured 2, Fall Out 4, Prey, DOOM VFR, Fall Out 4 VR, Evil Within 2, Wolfenstein, Rage 2, Wolfenstein: Youngblood, Fall Out 76, Starfield, Ghostwire: Tokyo, Deathloop, Doom Eternal, Quake Champions*, and *Battlecry*. Only two games – Commander Keen (mobile puzzle game), Elder Scrolls Legends (digital card game) – fell entirely outside this format, and the remainder were spin off from the studio's Elder Scrolls fantasy series (which also contains aiming and shooting in small measures).

[125] When discussing videogames as an interactive medium it is important to differentiate iconographic genre's based on aesthetic tropes (like the Western, Sci-Fi, Romance etc…) from mechanical genres that define the specific verbs (the affordances of control offered the player) as per Mark J. P. Wolf's discussion of genre (2002, p. 116)

the advent of more powerful platforms, the convergence of genres has become increasingly apparent, with previously distinct gaming genres becoming difficult, if not impossible, to categorize" (Ip, 2008, p. 207). Shooting is now typically scaffolded by a broad degree of other activities derived from once separate genres: level progression systems and skill tress from roleplaying games (RPGs), crafting mechanics from survival games, branching narratives from adventure games, stealth mechanics, platforming/parkour and puzzles. All these mechanics, often contained within large 'open worlds,' once the mainstay of RPGs and particularly MMORPGs, fill increasingly longer playtimes (the average AAA game now takes between 30-60 hours to finish), to keep the consumer playing for longer in what is increasingly being understood as a 'games as service' economy (Schreier, 2017b).

In the crowded modern marketplace, this is a categorical imperative; indeed, few commercial games are released today that don't borrow mechanics and sub-systems from a number of genres to create a kind of all-encompassing Ur-text that will keep players locked into a product cycle for months if not years. Such is the level of competition for audiences, and the push for combinatorial novelty, that few genres have failed to incorporate the statistical growth, scalable objectives and levelling systems that once uniquely defined role playing games (RPGs), since these provide players with such a clear and quantifiable sense of improvement and progression, and thus a certain stickiness that encourages them to keep playing. Ted Tschang sees such combinatory aesthetics as characteristic of innovation in the contemporary videogame scene:

> From our data, a potentially important creative mechanism for innovating or even adapting products is combining features from past games, a mechanism that we term combinative creativity, resulting in combinative innovations. (Tschang, 2007, p. 1002)

Such a scenario is "especially true of innovations that are more than incremental in nature" (Tschang, 2007, p. 999), which as we have seen from Dymek and others (Maiberg, 2016; Whitson, 2013) is characteristic of the mainstream, AAA industry spiral. A reciprocal circulation can thus be identified in which the industry produces modified experiences and these elements quickly become internalised by the player base as standards, expected of all future games. Thus, iteration remains a watchword for the industry, describing a process of slow and careful cyclical refinement of tried-and-tested systems and ideas, preached at conference panels and in game design classrooms the world over, and rigidly constrained by industry norms and assumptions. These iterative cycles are traditionally built around the normative audience of 'core' gamers at its centre, those highly dedicated (and frequently young, male) audiences that developed alongside the console era's formalisation and identify strongly with its products (Dovey and Kennedy, 2006, p. 52; Dymek, 2012, pp. 38–39; Fron et al., 2007, p. 1). As Arsenault has also pointed out, game development is a process of gradual iteration of ideas, where a new game "stands between a wealth of existing artefacts and a horizon of promises yet to be actualized" (Arsenault and Coté, 2013). This occurs through the adoption and adaptation of dominant aesthetic and mechanical devices largely overseen by dominant genre categories like the FPS, along with the occasional burst of innovation that may result in the development of new devices that break from old conventions, leading to a newer cycle of iteration.

However, such ruptures are rare and, like the cautious innovation scholars like Todd Gitlin (1994) have observed in the TV and film industries, such incremental iteration on an industry level enacts a kind of formatting that considerably stymies individual creativity. Taking this thought further, many have argued that the huge budgets and growing financial stakes in mainstream videogame development have ultimately resulted in a hit-driven, risk-averse industry (Readman and Grantham, 2006, p. 263) adopting a cautious policy of careful improvements over wholesale innovation (Whitson, 2013). In particular this can be seen by the rise and unmitigated commercial success of the

first-person shooter (FPS), which has been linked to the social context of American military

exceptionalism and geopolitical intervention following 9-11 (Dyer-Witheford and de Peuter, 2009;

Robinson, 2012). This more-often jingoistic genre casts a huge shadow over modern gaming culture,

characterising what Stephen Kline et al. refer to as 'militarised masculinity' (2003, pp. 194–195). As

the scale of videogames has become ever more ambitious, and the level of competition all the more

ferocious, mechanical genres that were once quite separate (the platformer, the shooter, the role-

playing game) are now routinely combined, hybridised and reconfigured, leading AAA games to

consolidate around a specific set of aesthetic and mechanical formulas, that are being loosely

categorised as the 'open world action/adventure genre' that is quickly becoming the Ur-genre for

AAA production.

The difficulty corporations experience in negotiating the balance of innovation and familiarity can be

seen in a recent unprecedented press release quoting Ubisoft CEO Yves Guillemot addressing the

poor performance of *Ghost Recon: Breakpoint* (Ubisoft, 2019), the latest in a long-running franchise

of high-profile Tom Clancy properties. After a series of hedging statements about the overall fiscal

health of the studio, Guillemot reflects on three points he sees as contributing to the game's failure,

one of which is the issue of balancing innovation with familiarity that characterises the problematic

of risk taking where Ubisoft's "strategy of introducing gameplay innovations in our games has had a

very positive impact on our brands," but admits that Breakpoint did not take enough of a risk

resulting in a lack of sufficient innovation (Guillemot, 2019). Although couched in business-speak and

intended to justify the decision to delay several future releases to shareholders, statements of this

kind from Guillemot (who has always styled himself as something of a hands-on and down-to-earth

creative manager, rather than a distant executive), are rare even within earnings calls and illustrate

how game development in the upper-echelons is a fine balancing act of negotiation between player

expectation and shareholder demands, and between originality (or what the press release

euphemistically calls "differentiation factors") and familiarity. This particular source is all the more

telling since Ubisoft are broadly understood to be one of the core architects of the Ur-genre form of the open world action/adventure genre (Meikleham, 2017) via their *Assassin's Creed* series (Ubisoft, 2007-2018). Guillemot's soul searching might be taken not only for evidence of industry theorising at the highest echelon of AAA development but reveals the extent of the crisis of innovation in mainstream game development with major players at least paying lip service to the need to reassess current homogenising practices.

Furthermore, it shows how corporate decisions are always mediated by various other contingent factors including responding to changing audience tastes, and the extent of investment in established technology and processes (apparatus). Indeed, Guillemot's proposed solution to "implementing significant changes to our production processes" (Guillemot, 2019), although the extent or detail of these changes are not articulated, demonstrates how creativity, far from a mystical free-floating plasma, is bound up in the material composition of studios and the real articulation of processes within them, or what some actor network theorists have referred to as 'operations, topologies, and displacements' (Farías and Wilkie, 2015).

Such an image of the creative worker negotiating a trade-off between their personal freedom and creativity and the constraints of the systems they are embedded in, which they contribute to maintaining, is surprisingly compatible with prevailing notions of player agency in videogames, as embodied in Salen and Zimmerman's classic definition of play as, "free movement within a rigid system" (2003, p. 304). Games encourage players to experiment with interactions within the systemic parameters of the rules, without deviating from those fundamental constraining factors. As O'Donnell (2014) and Weststar (2015) note game developers are almost exclusively drafted from the passionate gaming fan base, and such gamer/workers have already internalised such notions of enterprise and individual agency from a life experience with the medium that are utterly compatible with the functions expected of them within the industry.

The competitive demand for highly detailed and specific asset creation also inevitably leads to more specialisation amongst workers (O`Donnell, 2014, p. 68), an increased division of labour in the industry and, I argue, less creative fulfilment for individuals in such roles. Such dissatisfaction with the perceived factory farm nature of AAA games production is one way to explain the migration from AAA studios to indie production, accompanied by a strong desire to create something in the kind of fun and free environment the myth of creative freedom originally promised (Fedor, 2011), but failed to deliver. In a piece on *Wired* one AAA developer working for Ubisoft reflected on why he had decided to leave the relative stability of the studio to go indie, and the key was the hyper-specialisation of the role in such an environment: "when people realize they're just one replaceable person on a massive production chain, you can imagine it affects their motivation" (Beaudoin, 2016). Evoking Caldwell's term the piece was entitled 'War Stories: What it's Really Like Working on AAA Games at Ubisoft,' and Beaudoin's reflective and critical tone demonstrates a growing awareness amongst such developers that the commercial industry is far from creatively fulfilling – for him the war story, far from building a sense of solidarity in the trenches as Caldwell has suggested it does amongst below-the-line movie workers, resulted in the developer deserting his post for a better life. The indie scene is notable for providing an outlet for this flow of disillusioned talent who seek to move away from the kind of 'cookie cutter' games Pinchbeck alludes to above (this will be explored in more detail in chapter 3).

The pursuit of innovation is, therefore, often a desire of the below-the-line creative labourer, rather than the above-the-line producer, who would likely be more aligned to the corporation's profit generating *raison d'etre*. Indeed for Cadin and Guérin "innovations are normally driven by 'marginalised actors' who tend to undercut routines (because they take risks), production standards (since they do not occupy a central position in the production process, they do not suffer from any ''constraints'' in this respect) and customary ways of doing things" (2006, p. 249). Many theorists

take this further, arguing how workers can thus be seen to, "themselves bear the costs of producing

commodities that are high risk, likely to fail, and involve considerable conception costs"

(Hesmondhalgh and Baker, 2011: 57), since they are not only the ones pressured to generate

successful ideas, which are then extracted by the company becoming part of its institutional

repertoire, but must do so whilst willingly being exploited within systems of churn and crunch.

Furthermore, if these ideas fail they are the ones likely to be 'let go' in order for the company to

protect the company's bottom line. O'Donnell summarises the situation:

> As workers are more frequently asked to bear the consequences of a denigrated and
>
> destabilised quality of life, they are asked to bear the greater amounts of risk once born by
>
> the organisation. Yet, because there is a perception that the individual can mitigate this risk
>
> through personal passion or perseverance, it becomes permissible to blame the individual
>
> for any feeling of insecurity. This plugs directly into a kind of libertarian worldview that
>
> dominates many of these industries. (O`Donnell, 2014: 153)

The system is thus linked to the broader system of neoliberalism that holds the individual to account

for their own perceived failures, whilst the overall system is protected from critique (Mould, 2018).

This is a process that Angela McRobbie (2016, p. 16) sees as central to the notion of

entrepreneurship and Lauren Berlant has famously called 'cruel optimism' "when something you

desire is actually an obstacle to your flourishing" (2011, pts. 31–32). In the postwar era the myth of

meritocracy, "the sense that liberal-capitalist society will reliably provide opportunities for

individuals to carve out relations of reciprocity that seem fair" (Berlant, 2011, pts. 63–66), ignores

the fundamental inequalities in wealth and power in society (some are born with more privilege

than others based on a variety of factors including social class, wealth, gender, race, and even

sexuality), and thus shields the system form blame even as the hard-won socialist welfare state is

slowly disassembled by corporate interests (Ibid.).

In the games industry, like most creative industries, workers desire to be creative and yet contracts almost exclusively give the development studio absolute rights over all creative and intellectual output from the worker whilst they are employed, a sure sign that it is the creative worker who is the raw resource of game design and led there by such a relation of cruel optimism. The expected meritocratic nature of game development that Weststar and Legault (2015) notes is perceived to be an intrinsic reality of the games industry, and is regularly used in recruitment advertisements that appropriate hyper-competitive gamer lingo to encourage applicants to 'be the best,' turns out to be, in most cases, an unachievable illusion. All this evidence of self-exploitation goes to demonstrate that the trade story that trumpets a developer's creative agency is considerably curtailed by the repetitive material conditions of work within huge teams, driven by an increasingly conservative and risk averse industry looking to maximise efficiency at all costs.

THE MYTH OF FUN: GAMIFICATION AND PLAYBOUR

Cross cutting this notion of creative freedom is a more fundamental assumption of individual freedom and pleasure that is suggested in the myth that working in the industry is always fun. For Banks such 'utopian discourses' situate, "personal and individual freedoms," that can now be, "exercised within the loose confines of a more 'enabling', playful and decentred set of work relations" (2007, p. 92). Deep texts such as behind the scenes promotional videos of workplace antics constantly reinforce this myth. For instance, for 'Talk Like a Pirate Day' the beloved British developer Rare (now an inhouse studio owned and operated by Microsoft) released a video in which the studio hired two pirate consultants to help the staff get into character for their swashbuckling adventure *Sea of Thieves* (2018). The 'consultants' (two of the developers in pirate garb) can be seen sword fighting in the canteen, stealing the company's many awards and generally causing mischief as they interact with the developers throughout the studio's Twycross campus (Rare Ltd., 2015).

But, behind the exuberant exterior of videos like that of Rare, the level of autonomy workers in the cultural industries really have is a fraught issue in theories around creative work. Drawing on the sociologist Robert Blauner, Hesmondhalgh and Baker summarise four types of alienation in the workplace, and the behind the scenes Rare promotional video is a potent example of how each one is claimed to be subverted through a game studio's supposedly playful approach. Firstly there is 'powerlessness,' the opposite of which is freedom/control (or what games call agency), which includes "control over pace, freedom from pressure, freedom of physical movement, control over quantity and quality of production, and control over choice of technique" (Hesmondhalgh and Baker, 2011, p. 28). In the video workers are clearly moving about, enjoying the outdoors (and burying treasure by the campus' own scenic lake) and the pirates themselves are an anarchic force of freedom, reconfiguring the space with their presence. The second is 'meaninglessness,' the opposite of which is purpose/variation in which, "workers may lack a sense of meaning when their own role is so circumscribed that they lack awareness of the purpose or function of the product" (Ibid., p. 29). It is this meaninglessness, being a cog in the machine, that prompted Beaudoin to leave Ubisoft due to the over-specialisation of his role and the lack of personal ownership over the product in such a large team, but by contrast the video shows the studio to be an intimate, familial environment. The third is 'Isolation,' the opposite of which is community: "a state in which the worker feels no sense of belonging in the work situation" (IBID, p. 29). Footage of the pirates leading a raucous shanty in the meeting room give a sense of the camaraderie at the studio. Finally, there is 'self-estrangement,' the opposite of which is challenge/self-esteem, "Self-estranging work produced boredom and threatened self-esteem" (IBID, p. 29). As with gaming itself, the appropriate amount of challenge leading to personal growth is considered key to fulfilling games work, a point playfully alluded to in the video when one developer, sodden with water, proclaims that he had no idea he could outswim a shark.

The way the inverse of these 4 types of alienation map onto the positive qualities most often

associated with games is remarkable; Games seek to motivate player engagement through building a

sense of agency or control and seek to prolong the experience by introducing mechanical variation,

or increasing challenge, and they are heavily embedded in an active and impassioned community. All

are clearly presented in this promotional video as an embodiment also of the production conditions

that bring the game into being. The implication is clear: games are fun and so is (or should be)

working in the games industry. One reason why the games industry, along with other new media

companies such as eBay and Google, lead the way in structuring their workspaces as playgrounds,

O'Donnell claims, is that this blurring of the boundaries between work and play makes employees

willingly submit themselves to the long hours of crunch necessary to bring a game to market, by

"enabl[ing] and encourag[ing] workers to push harder and longer than they would otherwise" (2014,

p. 32). For Weststar game developer's "work and leisure times are blurred through their hobbies of

video gaming and the constraints of their working hours" (2015, p. 1250), so that it's hard to

disentangle one from the other. The traits of resourcefulness, adaptability and perseverance that

mesh so well with notions of individualism and enterprise that underpin the modern workplace,

have been inculcated into the player through the process of play. Inevitably, then, the closer the

games industry can simulate an environment of play within the workplace, the more inclined

workers will be in unquestioningly accept its conditions.

It is the above elements of games, along with their structured reward systems and sense of

competitiveness, that have been appropriated by the pseudo-science of 'gamification', a business

management strategy for optimising labour through introducing game like aspects such as

reinforcement schedules to non-game situations (Burke, 2014). Jane McGonigal is a game studies

scholar who has built a career on the concept after delivering an immensely successful TED talk

(McGonigal, 2010) and best-selling book (McGonigal, 2012), the key thesis of both being that the

positive psychological benefits of gaming can provide an outlet for the self-actualisation not allowed

within our work-a-day lives. Something of a Richard Florida of the movement, McGonigal's rose-tinted view of a world saved by gaming took on like wildfire amongst designers who had long sought ways to justify the social value of their medium. Like McGonigal, Hesmondhalgh and Barker draw explicitly in their discussion of 'good work' on Hungarian psychologist Mihaly Csikszentmihalyi's influential notion of 'flow' (Csikszentmihalyi, 2002), in which alienated labour gives way to "pleasurable absorption" (Hesmondhalgh and Baker, 2011: 132). Such notions deriving from the field of positive psychology are often at the heart of romanticised notions of the craft aesthetic (Sennett, 2009), just as they have become a cornerstone of game design in recent decades (see Salen and Zimmerman, 2003). Indeed, the phenomena of gamification has, in a very short period of time, become enshrined as a central component of games industry business discourses (Burke, 2014), although many critics of the concept, like Ian Bogost (2015b), have been deeply suspicious of such claims, pointing out that gamification is inherently exploitative and only takes certain qualities of games – their reward schedules, feedback loops and point scoring systems – rather than entities other scholars see as essential components of games such as their potential for uncertainty, agency and ambiguity (Costikyan, 2015; Malaby, 2007; Sutton-Smith, 1997).

The similarity of terms used in the theorisation of work and games, and particularly evident in the discourse of gamification, suggests that the latter could merely be seen as a continuation of the former. Indeed, whilst games are often seen as an escapist medium, it appears they can also be complicit in the labour system when applied instrumentally by softening the negative effects of alienation. I saw this mechanism of control in practice at the 2019 UK Interactive Entertainment (UKIE) Student Conference at Somerset House, where Rare's executive producer Louise O'Connor (2019) introduced the studio with a similar video showing the hi-jinks and fellowship behind the scenes for the assembled students from various game design courses around the country. O'Connor's accompanying talk, split into 12 lessons for getting on in the games industry, is also remarkable for the extent it addresses many of the work-place issues we have been exploring in a

sideways manner. For instance, to the games "passionate audience" (a constantly evoked industry euphemism for the over entitled and often hostile demands the most hardcore gamers level at designers) she proclaims that wannabe designers cultivate "a thick skin"; to break into the industry or move up its often obscure promotional ladder she exhorts students to "work harder than anyone else," speaking to the competitiveness I have explored above; and to the general instability of the work environment the proposed solution is "you've got to learn to adapt". In each instance the onus is placed on the worker to change themselves to fit the unreasonable demands of the industry, rather than to organise and attempt to push back against them, which is a tendency typical of neoliberal ideology and its emphasis on the flexibility of the individual. Such talks, of which this is representative, occur at such conferences acting as contact zones between the industry and the public (and particularly the growing audience of young, wannabee game designers) all over the world. They can be understood as public-facing, promotional trade stories that demonstrate the degree to which the values of the industry are ingrained at all levels of production and are perpetuated outwards into wider discourses through a pervasive rhetoric of playfulness by those thoroughly entangled in the industry's systems of work/play, in order to ideologically interpolate (Althusser, 2014) potential employees into the industry's modus operandi.

Mocking the phallic imagery of one gamification symposium and the pharmaceutical use of the term as a business panacea, Bogost once called the concept: "viagra for engagement dysfunction, engorgement guaranteed for up to one fiscal quarter" (2011). I would also suggest, at the level of labour at least, that gamification functions as a placebo for ameliorating the symptoms of work/play, without actually fixing the underlying issues. Such a realisation makes the playful workspaces of modern tech companies, as well as the many games companies that have adopted this approach, an inevitable consequence of the broad penetration of gaming and interactivity into wider culture commonly described by the portmanteau term playbour (Kücklich, 2005). In his coining of the term Julian Kücklich discussed the role of modders (players who modify a game in various ways, often

using tools provided by the developers) as emblematic of the industry's ingenuity in offloading the risk of innovation onto marginal actors, in this case its most dedicated players. The modding scene provided (for very little cost) additional value for games in the form of extra content, reduced R&D and marketing costs by generating new ideas, and formed a trained pool of amateur game developers from which studios could later recruit.[126] As such Kücklich argues that, "the precarious status of modding as a form of unpaid labour is veiled by the perception of modding as a leisure activity, or simply as an extension of play" (2005).

Such attitudes towards the playful workplace, and the manner in which it leverages the latent impulses of gamers, are evident in the very origins of the industry as it grew out of an informal and anti-authoritarian hacker culture. For instance, in *Masters of Doom* (Kushner, 2004), a typically rags to riches biography of John Carmack and John Romero (founders of the legendary id Software), suggests that even without a strategic top down implementation of playbour or gamified strategies, such structures organically and naturally form in independently established game studios where workplace organisation comes to reflect the characteristics of games culture as well as the ideals of the games they aspire to make with an emphasis on 'fun' at all costs (Koster, 2004). A foosball table, it seems, can cover over a multitude of sins, but as the Rare video indicates recent approaches to playbour have moved increasingly beyond modding or the strategic placement of bean bags in the office environment, diffusing into a generalised atmosphere and rhetoric of fun. Consequently a panel at the 2019 DiGRA conference, interrogating the continued validity of the term, argued that the way labour is expropriated by the capitalist framework is more nuanced now than ever since the inside and outside of the industry are harder to define, but the term playbour hadn't evolved to "capture the new meanings or realities of work" (Chia et al., 2019).

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[126] One of the companies who has most successfully utilised this approach is undoubtedly Valve, whose most successful and lucrative products (*Portal* (2007), *Counter Strike* (2000), and *DoTA 2* (2013)) all emerged from the modding scene, the commercial success of these games ensured by the grassroot communities that formed around them before Valve took ownership as their own intellectual property (as noted by Kücklich *Counter Strike's* creator Minh Le also found employment with Valve as part of his undisclosed buy-out).

Drawing on Fred Turner's study of cyberculture's co-optation into neoliberal commercial frameworks in the early years of the web, Aubrey Anable argues that "contemporary hacker/video-game-player-as-creative-worker is an ideal that emerged from, not against, the labour context of the 1960s and 1970s" (Anable, 2018, p. 76; Turner, 2008, p. 116). But this reconfiguration of identity of the gamer/worker cuts much deeper than just labour relations. Sherry Turkle (2005) and Katherine Hayles (1999) have both extensively and convincingly explored the general socio-cultural transformations that cyber culture, derived from and cultivated by a hacker ethos amongst computer hobbyists, has enacted on contemporary subjectivity, the former concentrating on how computers provide a powerful new metaphor for thinking about the mind (thus dethroning the dominance of psychoanalysis) and the latter on how cybernetics effaces the materiality of the subjects, lying the foundations for a cyborg posthumanism that is the essential subject for informational capitalism to work upon. Once more, as argued by Kocurek (2015), we see how central the videogame worker is to larger shifts in post-Fordist labour relations.

The new 'playful' approach to labour in the high-tech creative sector, which can be seen as key to these shifts on an economic level, has been most famously explored by Andrew Ross in his iconic study of New York creative design firm *Razorfish* in his book *No Collar: The Humane Workplace and Its Hidden Costs* (2004), which sought to reveal the exploitative practices under the studio's playful veneer. Ross notes how, "in the valley's technology startups, an anti-authoritarian work mentality took root, and over time it grew its own rituals of open communication and self-direction, adopting new modes and myths of independence along the way" (2004, pp. 9–10), thus forming an occupational community close to that of the games worker observed by Weststar. Rituals are a potent manifestation of Caldwell's trade stories since they possess a material spatial element; like religious rituals designed to constantly remind supplicants as to their place both within the symbolism of the religious story (the communion and the symbolic incorporation of the holy spirit)

and the material hierarchy of the church (the scale and structure of the cathedral to inspire awe).

Similarly in 'trade rituals' ideological processes are able to be recentred in physical spaces (Caldwell, 2008a, p. 80) and cultures of practice can be maintained through shared repetition. Such repetition is also a vital concept in ANT, because it "is what holds together networks" (Brown and Capdevila, 1999, p. 37), strengthening them through repeated use in a similar manner to the way iteration functions in game development. The notion of repetition also ties into Law's notion of performativity in both methodology and the thing being studied, which acknowledges that a method actively helps to bring a reality into being by isolating a pattern within the complexity being observed:

> It helps to produce realities. It does not do so freely and at whim. There is a hinterland of realities, of manifest absences and Othernesses, resonances and patterns of one kind or another, already being enacted, and it cannot ignore these. At the same time, however, it is also creative. It re-works and re-bundles these and as it does so re-crafts realities and creates new versions of the world. (Law, 2004, p. 143)

Just as ritualistic repetition in industry practices coagulate into norms of function and product, and the repetitions players experience within the mechanics of play over a multitude of games[127] help to train them into accepting the prevailing norms of gaming, analytical methods also seek to stabilise a specific normative reality of the industry. Here the structural characteristics of games can once more be seen to bear upon the industrial structure of their production, preparing games workers with the desired traits of the games industry. The ritual qualities of games have often been considered, beginning with Huizinga's pioneering study *Homo Ludens* where he claims play takes place in a magic circle sealed off from "ordinary life" and "proceeds within its own proper boundaries of time and

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[127] The repetitions demanded of play at the core of the game are normally referred to as its 'gameplay loop' in development (Guardiola, 2016; Momoda, 2016), and can be seen to echo within the text the repetitive and iterative movements of the industry spiral at the macro level of the industry itself. The flattening effect of ANT, in which micro and macro elements are studied side by side as part of the same network, would be highly effective at teasing these comparisons out but it is beyond the scope of this thesis to do so.

space according to fixed rules and in an orderly manner" (2016, p. 14). Salen and Zimmerman build

on this definition in their field defining book *Rules of Play*, although arguing that the magic circle is

not hermetically sealed but one that allows flow back and forth between the game world and its

surrounding culture: "within the magic circle, special meanings accrue and cluster around objects

and behaviours. In effect a new reality is created, defined by the rules of the game and inhabited by

its players" (2003, p. 96). Like the game space that, through an agreement to submit to the rules,

inflects ordinary objects with special meanings, game-like elements in the workplace serve to create

a ritual atmosphere that puts workers into play and appropriates play to instrumental ends as a neo-

Foucauldian mechanism of self-exploitation often captured by the term 'governmentality' that

suggests self-exploitation as "workers are trained to accept and reproduce *for themselves* the

precise conditions of their subordination" (Banks, 2007, p. 42). O'Donnell aptly captures here how

gamer attitudes to submit to rules match the cultures of gamework: "instrumental work/play is

rooted in the culture of gamers, who place significant importance on the act of working through the

complex problems found in videogames. Any circumvention of this labour is often seen as a

circumvention of the rules" (2014, p. 61).

Whilst fun and its corollary of creative expression has thus become the mantra of the games industry

at both the pole of reception and production, the notion that game work is simply fun is clearly

illusory. Whilst fun in game design theory is often seen as its own intrinsic reward (Costikyan, 2002;

Koster, 2004), it is thoroughly instrumentalised here to serious ends – though as with the Rare video,

it's often hard to tell where one ends and the other begins. Fun is institutionalised within office

environments and management techniques in order to ameliorate (at best) or disguise (at worst) the

exploitative practices within the industry.

Another important aspect of studio restructuring is the increasing movement towards agile

methodologies as a means of maintaining efficiencies in larger team sizes within a post-Fordist

production environment. The ambition of aligning the interests, abilities and passions of increasingly large teams has become a perennial challenge to project management in game development. The traditional studio structure and its work flow is built on a waterfall model of management, which O'Donnell criticises as an overly smooth and idealised form of development which moves seamlessly from "preproduction to production to testing (or Q/A) to golden master when the final version of the game is sent to the publisher" (O`Donnell, 2014, p. 138). The waterfall method, which is hierarchical and linear with influences flowing down a managerial chain, is reinforced in project management terms by a milestone model, which is linear, progressive and rigidly scheduled, as explained by Meredith and Mantel Jr: "As the project passes through each of the segments, it is subjected to a series of "quality gates"… that must be successfully passed before proceeding to the next segment," further the project must be meticulously planned and costed in advance with the "estimated time for each task… obtained from those who will do the work… The responsible person or department head should sign off on the final, agreed on schedule (Meredith and Mantel Jr, 2009, pp. 249, 248). For O'Donnell, this imagined workflow and form of scheduling doesn't account for the "iterative and messy" nature of development and provides an image that is harmful to the workforce and to the sustainability of the industry.

Writing about the use of such milestones to the publisher/developer relationship in the games industry Zackariasson and Wilson (2012, p. 7) note that the milestones become all the more central to the process, and thus more regimented, because they are typically linked to scheduled injections of cash from the publisher, who controls the purse strings in the relationship. As a result they rightly critique the "rigidity of the model, which leaves no room for creativity" and the fact that as a largely uncertain process it is often "impossible to define all the content of the game in the pre-project phase" (ibid). The solution is to leave the schedule at a more general and abstract level, whilst the "specific content should be left to evolve in cyclical iterations during the development using agile project models" (ibid). The movement to agile methods in the industry embodies something of a

growing compromise between executives on the publishing side (who want to manage the risk), and the creatives on the development side who want to be left to iterate.

Of course game development is still fundamentally a highly multi-disciplinary endeavour (combining increasingly large teams of artists, designers and programmers), and still largely follows a three part process of pre-production (where concepts are drawn up and prototypes explored), production (where the game gradually comes together), and post-production (where quality assurance testing drives a series of refinements and bug fixes). However, agile methods attempt to mitigate against the breakdowns in communication and efficiencies resulting from increasing scale and complexity by streamlining processes and have in the last decade utterly transformed the character of these structures through a combination of: a) flattening the hierarchies inherent in the waterfall model; b) transforming the linear milestone schedule into an iterative cycle; and C) developing new interstitial specialised roles within the production process that merge the disciplines that are typically hived off from one another in the traditional AAA studio model.[128]

Flattening the hierarchical structure of the studio (as much as possible) facilitates the flow of ideas, exerting a force that attempts to squash the dispersed network into something that more closely resembles the idealised linear production pipeline model that is sometimes used to discuss game development work flows. In practical terms, most agile methods organise work as a series of 'sprints' resulting in a series of iterative builds that are analysed in regular collaborative feedback meetings (Galvin, 2019). Feedback is taken on board from all stakeholders and priorities are collaboratively drawn up for the next sprint. The project is constantly using feedback (servomechanisms) to course correct and remain as efficient as possible. Further, rather than separate departments working in

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[128] The examples given by O'Donnell (2014, pp. 88, 93) are the technical artists and tools engineers, who mediate between the art and programming departments, but I would also add the narrative directors who mediate between writers and level designers, and community managers, who mediate between the studio itself and the communities of play they are increasingly attempting to build (this particular role, much neglected by games scholarship, will be the subject of a future project).

isolation, sprints are normally undertaken by multidisciplinary strike teams to prevent problems

arising from miscommunication. A recent high-profile game design textbook from designer/educator

Robert Zubek, *The Elements of Game Design*, is illustrative of how internalised agile methods have

become. Zubek explicitly approaches the topic of from what he identifies as prevailing industry

models, describing such agile approaches to breaking up larger groups into horizontally aligned

multi-disciplinary teams that he calls 'pods' or 'cells' and describes as "small units that combine

contributors from all three disciplines [programming, art and design] to implement specific features

from start to finish" (Zubek, 2020, p. 27).

Historically, agile processes can be traced from the lean production regimes that revolutionised the

global car industry in the post war period, originating with the 'Toyota method' in Japan as laid out

in the ground-breaking management study *The Machine that Changed the World* (Womack et al.,

2007), which coined the term 'lean' processes and popularised the concept in the West. Boltanksi

and Chiapello (2007) summarise the qualities of lean firms as "working as networks with a multitude

of participants, organizing work in the form of teams or projects, intent on customer satisfaction,

and a general mobilization of workers thanks to their leaders' vision". Such firms employ

"organizational principles like just-in-time, total quality, the process of continual improvement

(Kaizen), autonomous production teams." As a result of these processes, "the lean, 'streamlined',

'slimmed-down' firm has lost most of its hierarchical grades" and "has also parted with a large

number of operations and tasks by subcontracting anything that does not form part of its core

business" (Boltanski and Chiapello, 2007, p. 73).

Lean methods emerged at precisely the moment the world was transitioning away from the mass

production that marked high modernism to the flexible accumulation that defined post-Fordist

industry and that fits so well with the culture of postmodernism (Lee, 1993) and the economic

regime of cognitive capitalism (Castells, 2009; Hardt and Negri, 2001; Schiller, 2000). Given how the

network society is built on computing (Castells, 2009; Srnicek, 2016), it is no surprise that such lean

methods were heartily taken up by the burgeoning software industry, where they were rebranded

agile methods, their most famous early expression being the influential *Manifesto for Agile Software

Development* (Beck et al., 2001). The floodgates had been opened and these methods were

recounted and rebranded endlessly in a proliferation of management literature and conference

papers, metastasising into a multitude of different forms such as Feature-Driven Development

(Palmer and Felsing, 2002), Extreme Programming (Beck, 2004), SCRUMM (Keith, 2010), and Lean

Sigma (Galvin, 2019) to name a few. I propose that the rapid uptake of such methods by the games

industry in the last decade are a response to the rising cost of production, the growth of team sizes

and the increasingly competitive marketplace, because they provide a means by which AAA studios

can emulate the function of an indie studio internally, thus gaining some of the efficiencies and

flexibilities of that style of organisation.

This is very evident from my discussion with Catherine Woolley and Dion Lay on the production of

Alien: Isolation. Woolley clearly acknowledges this kind of structure when she talks about the

novelty of working directly with an artist, allowing for "constant iteration with the artist" the

proximity based collaboration making "the process nice and quick" [CW10]. Outside of the

collaboration with the artist Woolley collaborated regularly with other departments, including the

audio department with whom she had to negotiate the dynamic firing of dialogue as triggered by the

environment [CW22]. Lay also describes the effectiveness of such an agile team based approach:

"You very quickly realised that the best thing is to just get people together… you always end up with

something loads better and loads faster than just doing it by yourself" [DL15]. This example

demonstrate how in large teams reorganising the workforce into the kind of small sub-teams

characteristic of agile development (explored in the following chapter) not only increases the

tightness of iterative circles, but also allows for the flow of ideas from other departments. Indeed, a

studio should always be open to emergent ideas based on contingent encounters between

employees from various backgrounds, which builds in the looseness required of collaborative poetics suggested in the previous chapter. Whilst such an arrangement will not guarantee good ideas, like the arrangement of neurons in a brain, increasing the links in the network will significantly maximise their potential.

Lay discusses a moment in which another writer includes an audio log in which an employee is anxious about an android carrying around a rolled up magazine as a homage to a similar scene in the film *Alien*, and the environment artist (entirely unprompted) includes a corpse with magazine shoved down their throat to continue the narrative thread. According to Lay "Will had set up the joke and the artist did the punchline" [DL16]. This example, along with the ad hoc way level designer Catherine Woolley discusses contributing narrative to her levels is reminiscent of Henry Jenkin's conception of Micronarratives. Drawing on Eisenstein's concept of 'attractions', Jenkins defines a micronarrative as: "any element within a work that produces a profound emotional impact… communicated across and through these discrete elements" (Jenkins, 2004a). Whilst Jenkins sees micronarratives as structural characteristics of the videogame text as an interactive medium that stresses storytelling through primarily spatial means, it is interesting to reflect on how they might be formed through the structural arrangement of creative teams themselves.

This spatialization of the game narrative discussed in the example of *Alien: Isolation* in the previous chapter can be seen to be innovative in this context. is by no means a rigidly linear process, as implied by the metaphor of the pipeline and the older waterfall method of management and the level designers enjoy input from an early stage of iteration, because gameplay and how it synchs up to the story is a key concern of design. The looseness of the process is also much evident in the uncertainty present in how Lay struggles to recall it "I'm rambling a bit, I'm trying to figure out how it

actually works" [DL8].[129] This is not merely a case of Lay having a bad memory (the interview was conducted in 2015 a mere year after the game's release), but speaks to the complexities of the networks of collaboration at play in large studios – complexities that succeed in strengthening those networks by making their links very dense.[130]

THE MYTH OF WEALTH: AUTEURISM AND CULTURAL CAPITAL

In spite of such conditions explored above there is still considerable draw to the creative industries. In the context of videogames this is evident in the recent boom in game design courses at art schools and universities around the world, which is testament to the perceived financial and cultural capital rewards of training students for these fields (Keogh, 2019b). In turn the thousands of students graduating each year, trained in industry standard software and instilled with key theories, maintain the levels of the labour reservoir in a cycle that benefits everyone but the individual workers. Arguably students are exploited at both ends of the chain, paying high tuition fees to an institution that promises future creative and financial fulfilment in a heavily idealised industry (but rarely gives enough attention to the pitfalls they might encounter), before being subject to the exploitative practices of the industry at large.

According to McRobbie the provision of the art school, and to a lesser extent the university, moves to centre stage in "the age of creative economy, where subculture has become professionalized, aestheticized, and institutionalized through its formal status in the curriculum of the art school and where creativity co-opts a whole series of cultural practices previously considered informal or socially irrelevant" (2016, p. 41). But alongside this process is one in which business school or

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[129] At another point Lay tries to pinpoint the source of a contribution and finds it difficult to do so ("I'm trying to remember who. It might have even been art. I don't want to say who it is in case I'm wrong **[DL13].**
[130] What postmodernists like Deleuze and Guattari (2013) would call 'rhizomatic', since they resemble the messy interlinked complexity of a tuber's root system.

economist approaches are rolled into art school delivery (because to be an artist in the modern

economy is to be a self-driven entrepreneur also), as a result the business school model threatens to

"[supplant] the critical and analytical bodies of social science and humanities knowledge that

previously were installed within the curriculum of the 'art school'" (Ibid. p. 53). As a result the kind

of theories likely to be prioritized in such a setting are those that systematise design into specific

paradigms (a favourite being the 'Mechanics/Dynamics/Aesthetics' framework (Hunicke et al., 2004)

explored in the previous chapter) or otherwise benefit organisational efficiency (students are now

regularly taught agile methodologies[131] that are utterly key to current industry transformations), and

in my experience of three years teaching at such an establishment I have witnessed a continuous

push towards such business orientated pedagogy. Brendan Keogh, a game studies scholar who also

teaches practical game design argues that, unlike creative writing courses with which it has much in

common, because teaching game design is so industry oriented students have an unrealistic

expectation of finding work in an industry where in Britain, for instance, there is room for less than

10 percent of graduates each year (Keogh, 2019b). His solution is to try to give students "short-term

tactics for survival" before they are turned lose onto what is fast becoming a part of the "gig

economy" (Keogh, 2019b).

The glamourous appeal of the industry to passionate gamers, as pointed out by writers like

Weststar, is a key factor in the perpetuation of these conditions in spite of growing awareness of the

conditions of churn and crunch. Such exploitative work practices wouldn't be viable in the first place,

or sustainable in the long term, if it weren't for the seemingly inexhaustible labour pools that the

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[131] Although it is beyond the scope of this thesis to fully consider this, it is my belief that such agile processes, derived from the automobile industry (Womack et al., 2007) but thoroughly adopted by the software industry (Beck et al., 2001), are not only a key vector of studio reorganisation, but are a means for larger studios to emulate through their material arrangements (for instance the formation of interdisciplinary strike teams handling small chunks of the game, flattened hierarchies to aid flow of decisions and iterative cycles of development known as 'sprints') some of the nimble practices pioneered by the indie sector. These important management paradigms are yet another lacuna in game studies and I already have future projects planned to explore these further as a continuation of work in this thesis.

games industry, like the rest of the creative industries, draws from (Hesmondhalgh and Baker, 2011, p. 114). In spite of its many problems, for many the opportunity to work in the games industry is a labour of love, a continuation of a passionate engagement with play through childhood and young adulthood (O`Donnell, 2014, p. 22). Others feed off the cultural capital and prestige associated with such careers. This is a result of the association of the author as individual creative genius (Foucault, 1991c; Williams, 2017) inherited from the romantic era and still so integral to the creative industries that "the concrete and named labour of the artist – a particular and relatively privileged form of creative worker – is paramount and must be preserved" (Hesmondhalgh and Baker, 2011, p. 83). The result of this fetishized celebration of individual talents within otherwise highly collaborative, dispersed and mass industrial processes, can be utilised as a form of prestige branding in many cases.

Such stories of big personalities and rebellious hacker/artisans abound in videogame history, which attests to the individualistic and anti-authoritarian hacker ethos the industry grew from, but also speaks to what McRobbie notes is one of the core traits of the cultural industries; that it is built on an extension of the celebrated notion of the "flamboyant auteur" to a much broader range of cultural phenomena (2002, p. 22). Because the work is desirable to others, because of its associations with glamour and cool, "recognition may, in some cases, feasibly act as compensation" (Hesmondhalgh and Baker, 2011, p. 124). Although individual studios may initially suffer to keep these delicate egos in check, the industry as a whole is seen to benefit from the disruptive innovations they cause (as will be argued later), and so has a vested interest in keeping such trade stories of rebellious creative geniuses in circulation. Such trade stories also serve to perpetuate the desirability of that industry to new recruits, as per O'Connor's talk, and for those workers already in it (and growing more jaded day by day) serve to constantly remind them how lucky they are to be in the industry they fantasised about so much throughout childhood (so they are ultimately less likely to ask for more).

For O'Donnell the romanticised trade story of 'breaking in' becomes the greatest draw to the games industry. According to O'Donnell this desirability in the video game context is fuelled by a pervasive culture of secrecy, that veils the material realities of game development work to potent effect as a marker of distinction, an "attempt by developers and the industry to hold themselves apart," which ultimately "lends game development a mystique or desirability" (2014, p. 39). The games press perpetuates such trade stories by relentlessly focusing on success stories and tales of rags to riches that disproportionately emphasise the small frequency of mega hits over the vast majority of absolute misses. This is partly a desire to promote the positives of the industry to raise its cultural capital, as the industry as a whole struggles for cultural legitimacy, but the longterm effect is fuelling the romantic myth of the games industry that only executives really benefit from. For instance one need only look at the worshipful language used to discuss the rise of *Minecraft's* creator Notch across a wide swathe of publications (Goldberg and Larsson, 2015; McVeigh, 2013; Campbell, 2014). As Hesmondhalgh and Baker observe such a focus on the celebrity auteur can serve the naturalising function of myth, by downplaying the myriad factors that can result in such fame (2011, p. 229), and for O'Donnell this focus on a handful of celebrated auteurs such as Ken Levine and Hideo Kojima as "rock stars" not only effaces the realities of the industry, but masks the collective labour of hundreds of below the line workers (2014, p. 163).

Whilst a subset of trade stories are persistent in their emphasis on the need to hustle and work hard (O'Connor, 2019), which in communities of gamers and tech workers who typically value notions of struggle and meritocracy (Paul, 2018) in striving for success, there is another set of trade stories widely circulated that suggests that a large part of this success is down to serendipity. The origin story that surrounds Ryan Payton, one of my interviewees, is illustrative as he was offered a job out of the blue by Hideo Kojima after interviewing him at the Tokyo Games Show, because he happened to start speaking Japanese with Kojima's translator, but was only even there because he had taken

the interview slot given up by a journalist friend who was ill (Brown, 2013; Gettys et al., 2015).

Stories of good fortune like this one turn breaking into the games industry into a lottery, even if

Payton worked hard to put himself into the situation (moving to Japan, learning Japanese, becoming

a games journalist), which gives life to the neoliberal fantasy of 'making it'. Earlier I argued that the

two prevailing categories of what constitutes a game, put forward by Roger Caillois (2001), are those

of chance (alea) and competitive struggle (agon). The fact that both of these core characteristics

should come to play such a role in discourses around breaking into the industry is hardly surprising.

Indeed, they often appear both at once, for instance Notch is simultaneously seen as a creator who

single-handedly struggled over several years to develop *Minecraft, but also* as an overnight success,

elevated to stardom by the fickle gaming gods. For budding young developers willing to sacrifice

almost everything (Swirsky and Pajot, 2012), the circulation of both flavours of breaking in trade

stories – the agonistic story of heroic struggle as a test of skill, as well as the alea-inflected narrative

of the serendipitous event, like a rare loot drop in an RPG – are essential to fuel the fantasy of

working in the games industry for the estimated 10,000 game design students graduating each year

worldwide (McLean, 2018) not to mention those that attempt to break into the games industry

outside of academic context.

Such trade stories are created and perpetuated within the industry, particularly by the educational

establishments who have developed to serve and profit from that industry and are then directed

externally to the new generation of eager workers, and echo Berlant's notion of cruel optimism in

their encouragement of creativity that only a handful will be able to take into a career (and even if

they do make it into the industry will likely find that creativity heavily constrained by the realities of

game work (Kerr, 2010) explored above. The ones that manage to break in each bear proven new

ideas in the form of protypes or training, which function as a significant form of cultural capital

(Bourdieu, 2010), but for everyone who makes it dozens more fall by the wayside. Because the

gaming press values such rags to riches stories over those of failures, the meritocratic myth of the

industry is maintained and the labour pool the industry relies upon continues to be fed by the regular thaw of new talent feeding its outer tributaries before inevitably flowing to the sea of AAA work forces.

TOMB RAIDER: AUTHORSHIP, POWER AND NARRATIVE IN COMPLEX PRODUCTION ENVIRONMENTS

Rhianna Pratchett has been called "one of the most influential and recognized women in games." (Takahashi, 2016) and "one of the few 'rock stars' of video game writing" (Gorey, 2017a). She is seen as a progressive figure in both the drive to recognise the writer's role in videogame creation and to promote further diversity in the workforce, both issues she has spoken about extensively (BAFTA Guru, 2013; Pratchett, 2017, 2016a, 2016b). Despite this the following case study of *Tomb Raider* (Crystal Dynamics, 2013), Pratchett's most high-profile role rewriting a veritable virtual icon of videogame culture, will show that as a freelance writer she is still considerably constrained within the structures of AAA game development. Exploring such contradictions allows us to understand Pratchett's function as an actor in a larger network, aptly demonstrating the complexity of game development and speaking to many of the themes discussed above.

Despite being posited as a creative visionary behind the Tomb Raider reboot by myriad articles in the games press and beyond (Gorey, 2017a; Martin, 2012; Peel, 2016; Pratchett, 2016a; Saeed, 2018; Takahashi, 2016), for freelancers like Rhianna Pratchett its increasingly hard to fulfil the role of visionary described above since by the time she is bought in the "high concept stuff that the developers do themselves internally" [RPR3]. This becomes all the more extreme in circumstances in which the writer is bought in very late in the hope that problems with the story can be fixed, or even a story added in its entirety at the eleventh hour. Pratchett calls these jobs "'narrative paramedic projects,' where the story is bleeding very badly at the end and someone's said, 'for god's sake get a writer!'" and attempts to avoid them because "you can't have any real meaningful impact on things"

[RP2]. Similarly when Chris Gardiner inherited the helm of Fallen London and Sunless Sea in 2016 from visionary auteur Alexis Kennedy[132] who had decided to move on to new projects (Sinclair, 2016) he also inherited "the core themes of what the game was going to be" [CG3].

The above discussion revealed that cultural labour is always based on a degree of tacit negotiation between freedom and control. Pratchett explicitly spoke of this when considering the pros and cons of her own role as a freelancer:

> I give up power for freedom basically, working like this. So I don't have the power that I would have if I was on site to kind of guide things on a day to day basis, but I do have the freedom to take other projects and work on other mediums and just generally strengthen myself as a writer. [RPR7]

As a freelancer working at a distance (an increasingly common situation for many games workers as the industry makes increasing use of outsourcing and temporary contracts to mitigate increasing production costs) Pratchett had to rely on allies within the development studio, like Noah Hughes the creative director or senior narrative designer John Stafford, to interface between various teams, all with their own priorities, on her behalf (Takahashi, 2016). Above I argued that such interstitial management roles as narrative designer emerge in large teams to formalise what in smaller teams would be a more ad hoc relationship between Pratchett and the level designers: "they're sort of doing what the level designers were doing for me on Overlord [(Triumph Studios, 2007) Pratchett's previous game] … they often become a conduit between me the writer and the designers" [RPR5].

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[132] In 2019 Alexis Kennedy was embroiled in an all too common scandal including allegations of misconduct against female employees, which was confirmed by Failbetter games new CEO Adam Myers (2019), in a statement that distanced him from the studio. With this in mind I use the term creative visionary in this instance not to endorse Kennedy in any way, but in the interests of consistency with the terminology used throughout. In general the term 'visionary' in my usage should not necessarily be seen to carry the kind of positive charge it does in entrepreneurial discourses, rather it is being adopted critically and somewhat ambivalently to describe a certain positioning of a creative talent at the heart of a project.

But Pratchett's writing wasn't just constrained by the day-to-day micro demands of level and gameplay design, but by the macro demands of the overall vision: "Crystal [Dynamics] just didn't want the same tone to the character. That wasn't my decision, but I had to write to their vision, and I completely understand that" (Pratchett quoted in Yin-Poole, 2017). Here, as elsewhere in AAA development, even with a writer as prestigious as Pratchett working on a BAFTA winning story, game writing remains significantly constrained by numerous demands that are systematised throughout the production framework.

Still, Pratchett was involved relatively early in the process of the *Tomb Raider* reboot and publicists were keen to emphasise this early involvement and the credibility it bought to the series, with CEO Darrell Gallagher announcing:

> Rhianna has been working on the game with the narrative from its early inception… She has brought a unique perspective to the project and helped us explore the character origins of Lara Croft. There is no doubt that Rhianna has brought a depth and credibility to Lara, a heroine who will really connect with today's gamers. (Darrell Gallagher quoted in Corriea, 2012)

As Esther MacCallum-Stewart observes, in highlighting and emphasising Pratchett as the game's writer, "Crystal Dynamics strongly suggested to their players that *Tomb Raider* had undergone an ideological change as well as a ludic one" (2014). After all, having such a respected female author in charge of the project was no doubt a reassuring statement in what must be one of the riskiest reimaginings of a popular culture icon in recent times. Indeed, so central is Lara, still, to discussions of empowered female role models in videogames that many journalists picked up and emphasised this narrative thread (Lejacq, 2013; Takahashi, 2016), with even mainstream and high-brow news outlets like *The Guardian* covering the game's development (Stuart, 2013). Such exposure in the

publicity apparatus justifies my choice of Pratchett as an important interviewee, ideally placed to reveal something of the complexities of these processes.

In an article that undertakes an overview of the extensive academic responses to the series' controversial and much maligned protagonist, MacCallum-Stewart argues the series has become a "focal point for critical debate surrounding the representation of the female protagonist and the gendered body in games" (2014). Her argument is that as Lara was rejected increasingly by feminists and other academics as a site of potential female play and resistance, she became aligned more and more through the development of the franchise to the male gaze and the prevailing notion of heteronormative male gamer that dominated videogame consumption through the nineties and early noughties (Ibid.). According to one article, which exhaustively chronicles the series troubled trajectory through its first six games under original developers Core Design, tells of how, after publisher Eidos realised the potential of the title, the game's marketing was specifically constructed around Lara's heavily objectified body (Yin-Poole, 2016). Lara appeared on the covers of several high profile lads mags (*GQ*, *Loaded*, *The Face*) as a cyber model, meanwhile in real life Eidos employed three models at ECTS in 1996, resulting in a widely circulated sleazy promotional image of future company President Ian Livingstone with his hand on Katie Price's thigh. The reboot, in the words of one journalist is about "transforming the tough-as-nails archaeologist Lara Croft from gun-toting boys' pin-up into a deeper multi-faceted character" (Saeed, 2018), and rarely have the stakes been higher in a remake, given this embeddedness in early male dominated context of gaming Fron et al. (2007) have called the hegemony of play.

Lara exists in a perpetual tug-of-war between progressive notions of her as an empowered site of liberated female play and regressive notions of her as "a barbarised representation of falsified femininity" (MacCallum-Stewart, 2014); between 'feminist icon' and 'cyberbimbo' as Helen Kennedy memorably observes (2002). Pratchett is very conscious of this troubled history of the character, and

the level of scrutiny on her script as a result. For instance, she has also commented on the disservice the marketing of the series has historically done to Lara: "The marketing was responsible for a lot of the sexualised portrayal of Lara… [it] elevated her, but at the same time narrowed perceptions of her" (Pratchett quoted in Saeed, 2018). Indeed, discussions of her involvement reveal Pratchett's desire, as a woman who grew up playing as Lara, to salvage her as a positive role model (Gorey, 2017b).

The presence of high-profile women in the development team (level designer Heather Stevens and writer Vicky Arnold), does complicate the reductive reading of male developers conceiving Lara in solely exploitative terms, although the many stories that have emerged from this most picked over of videogame histories suggest a significant tension between how the developers perceived the game they were creating and how it was ultimately marketed. Disagreement over the sexualisation of Lara reputedly is the cause of her creator Toby Gard departing Core following the first game's release, turning his back on hundreds of thousands of pounds worth of royalties (Thorpe and Jones, 2018). However other sources suggest his motivation was more inspired by personal pique at being overruled by the marketing team, and that his original design was far from innocent, with colleague Gavin Rummery suggesting that: "He always claims he slipped on the mouse and made the breasts bigger than he meant to… Toby said, if you're going to be following behind her, she might as well be appealing to look at" (Quoted in Yin-Poole, 2016). Regardless of Gard's motivations, this disagreement in sources demonstrates the complexity of the situation, the tensions between departments over the creative control of Lara, and the uncertainty surrounding the motivations of the numerous actors involved. The very beginnings of Tomb Raider illustrate perfectly how the discursive meanings that circulate around a game can shift and warp; the encoded cultural meanings of a text are often the emergent result of a tug of war between various actors both within the studio and the publishers and platform holders it is responsible to. Such a picture paints the game studio as anything but a coherent entity.

For Pratchett this complexity is part and parcel of being a writer for an interactive highly multi-disciplinary medium like videogames for it is not enough to tell a good story, or even to consider how this might mesh with what the player might want to do, but furthermore a working knowledge of the design process is essential to understand the material ways that story is implemented in the actual game through processes like the development of cutscenes, gameplay systems and level design, to name just three specialist roles that must translate Pratchett's story into an interactive context:

> Even if you don't consider yourself a narrative designer, you really need to understand about … how games are designed. Because then you know how stories are put together, and the mechanics of the world, and maybe what some of the designers will be fighting battles for… because it's dependent on things like level design, positioning, and mechanics, and camera, and all sorts of stuff. And you've got to know how the player is going to experience the story. [RPR23]

Reading the messaging around Pratchett's announcement in the press one might be forgiven for imagining her as calling all the shots when it comes to the game's narrative, but just as with every other writing role in her career (indeed, like any videogame writer) Pratchett was constrained by a wide variety of factors: "when you're talking about teams of hundreds of people, you are really a cog in the machine. The narrative team is important, but so are all the other teams as well, and they're all fighting for space and agency and budget and time and everything else." (Rhianna Pratchett quoted in Yin-Poole, 2017). Pratchett's words here and in the above quote are littered with the language of agonistic struggle, depicting game production as a series of battles over ideas in sprawling networks of creation where asymmetric conditions of power exist between the various actors

Stuart Hall's (2007) famous essay 'encoding/decoding', states that there are not only three specific

reading positions at the level of reception – dominant/hegemonic, negotiated or oppositional –

which guarantees that mediated messages are never received naively and universally by a passive

audience, but that this variable interpretive framework is mirrored in the production contexts. The

encoded message is not necessarily ideologically homogenous due to the complexity of production

and the myriad parties involved. In a passage that foreshadows Caldwell's methodology, Hall

considers some of these factors:

> Of course, the production process is not without its 'discursive' aspect: it, too, is framed
>
> throughout by meanings and ideas: knowledge-in-use concerning the routines of production,
>
> historically defined technical skills, professional ideologies, institutional knowledge,
>
> definitions and assumptions, assumptions about the audience and so on frame the
>
> constitution of the programme through this production structure. (Hall, 2007, p. 479)

The struggle over Lara's meaning that occurred (still occurs) between, developers, publishers,

marketers, audiences, journalists and academics demonstrate these processes in practice and

explains the level of attention on the reboot helmed by Pratchett.

More than a simple fictional character, Croft is a vital cultural phenomenon, but also a valuable

piece of intellectual property with a long legacy. Hence the importance of brand manager Karl

Stewart, who works at an executive level with Darrell Gallagher, who decides on the overall tone and

direction of the character, thus attempting to regulate these competing meanings. In an interview

with *Digital Spy* Stewart makes clear that the reboot is needed to, "sustain the future of the

franchise," and, "to make [the character] culturally relevant for today's audience" (Reynolds, 2012).

This marks the shifting concept of what constitutes 'the gaming audience' in a period of industry flux

one of the most potent aspects of current industry theorising. It also points to the fraught notion of innovation, something that companies struggle with at the executive level of creative management as is evident in the quotations from Guillemot above and Stewart's contradictory and ambivalent reflection here on the motivation behind changes to the formula: "people know what we're trying to achieve is more about bringing a very different perspective, but still making it familiar, yet different" (Reynolds, 2012). Change in the AAA industry is highly risky and has to be carefully managed and couched in terms of familiarity; it is implemented here out of economic necessity, in which the perceived costs of retaining the current recipe (and along with it the material arrangement of the studio) is thought to outweigh the potential gains that might be made through changing the ingredients. As the end result bore out, the changes were an effort to bring *Tomb Raider* more in line with the new industry standard model of the open world action/adventure explored above, consequently putting far more emphasis on the mechanics of shooting than the traditional activities of exploration and tomb raiding.

Often the way such change is communicated is anything but coherent and reveals the inconsistencies and breakdowns in communication within the complex network of the AAA environment. Such complexities came to a head during a highly scrutinised and debated 'Crossroads' trailer (2012), which had intended to show the new raw edge to the series and give a hint of Lara's developing resourcefulness, but controversially seemed to depict her as a victim of sexual assault. Although Pratchett claims that the sequence was taken out of context - "they didn't really know the context of it and obviously there was some things said in the interview about it that were just not accurate" [RPR25] – the case was hardly helped by a story in the Sun newspaper, with the headline "Lara Croft's 'rape' ordeal in video game hell" (Quoted in Yin-Poole, 2017).

A controversy in videogame culture can relate to the notion of a glitch or bug in the game's code, something that developers try to remove through careful testing processes. Aubre Anable explains

the affective dimension of this process in which, "we usually feel the code only when there is a problem, when it does not work as we expect it to, and the seams of our digital devices and the smooth processes they run are exposed" (2018, p. 66). Similarly at the level of production such controversies, glitches and disputed moments of creation are, in ANT terms, a kind of rupture through which the inner workings of the formerly mute object (the secrecy of the game studio) become visible once more since all the actors rushed to the crisis to give statements, and in doing so often reveal assumptions about the processes that came to form the black-box in the first instance (Latour, 2005, p. 81). Latour's approach to controversy as a means to recover the social traces left by an overwise closed entity helps us to pry open the otherwise imperiously sealed black-box of game production, with its carefully controlled public relations messaging, in order to reveal the tensions at play within the supposedly coherent entity of the studio.

With Pratchett's involvement as writer as yet unannounced, fire-control was handled by a producer named Ron Rosenberg who justified the sequence to Jason Schreier of *Kotaku* in terms that smacked of paternalistic condescension:

> 'When people play Lara, they don't really project themselves into the character,' Rosenberg told me at E3 last week when I asked if it was difficult to develop for a female protagonist. 'They're more like "I want to protect her." There's this sort of dynamic of "I'm going to this adventure with her and trying to protect her."' (Rosenberg quoted in Schreier, 2012)

Coming from a male producer statements like this only served to play into reductive views of Lara as a plaything of patriarchal producers and audiences – a view of the game that itself has been critiqued by MacCallum-Stewart (2014) as highly reductive – and sent out warning bells to the growing field of games journalists now more attuned to the historic legacy of sexism and the lack of diversity in the industry than ever before. Indeed for MacCallum-Stewart one thing the controversy

does reveal is "the increasing sophistication of players and gaming communities" particularly vis-à-vis the issue of gender inequality in games (2014) – in short their growing willingness to take on oppositional or negotiated methods of decoding, rather than accepting the text's meaning as given. Cara Ellison, for instance, was prompted by the trailer to critically reexamine the series, arguing that if there were more female developers involved in the process they "might have said how much [they identify] with Lara as a person and not made her sound the equivalent of a plaything that men like to flick across a map" (Ellison, 2012).

Due to the conventions of the medium and the historical gendered composition of its audience the point of view that is imagined as that of the player is one that panders towards a highly conventional masculinist (if not outright patriarchal) relation between the player and the protagonist; one framed around protection and control rather than empathy through immersion (Schleiner, 2001). Rosenberg's comments reveal the inability for many game developers to imagine their audiences in anything but traditional terms. Meanwhile, Pratchett represents what can come from a new perspective entering the industry, as longed for by Ellison, and her thoughts on the matter echo theorists like Brendon Keogh (2018a) who have discussed the evolution of the first person shooter genre around a male dominated militaristic fantasy:

> when I think of the history and development of shooters in particular, it seems like the entire form has grown into this huge market around a common male fantasy. Young men were historically the target demographic—even if they may not be anymore—that these kinds of games were designed for, marketed to, and ultimately played by." (Pratchett quoted in Lejacq, 2013)

For Pratchett, attempting to subvert this arrangement through her rewriting of Lara, the difficulty is in splitting the difference between writing empowered but believable female characters that can

speak to a wider audience, but that aren't just slotted into male action roles as "men with boobs" (Pratchett quoted in Lejacq, 2013); in short, to say something authentic about the female experience without losing the sense of empowerment that the action adventure role inspires. Pratchett's thoughtful industry theorising here clearly builds on the ground of *Gender Inclusive Game Design* opened by Sheri Graner Ray, but I feel demonstrates a growing sophistication of these terms, rejecting Ray's tendency to express femininity in biologically reductive terms, but instead to show how in the imaginative domain of videogame power fantasies (which are already anything but realistic) there is no logical reason why female characters should be any less powerful than that of male protagonists.

This trailer attests to the problematic of asserting a coherent and empowered vision of Lara in an industrial art form involving myriad stakeholders, all of whom see the product in slightly different terms and with different priorities. The trailer, as a sequence plucked from dozens of hours of gameplay and such a complex production environment, and framed based on the interests of the marketing department, could not hope to do justice to this complexity, but the situation was certainly not helped by the discursive framing of the scene by producers within a regressive rape revenge scenario as Lara's moment of transformation. It demonstrates the methodological need to attend to the complexities of the production context in order to understand the full dimensions of a given text (whether that be a full game or a promotional trailer).

Curiously echoing the struggle between the marketers/publishers and developers in the series' origins, and therefore a version of the creativity/commerce duality of production, the appropriation of Lara by the marketing department (strengthening its position in the network through an ad-hoc alliance with QA, outlined below) once again sees Lara sexualised and objectified seemingly in spite of Pratchett's idea of what she wanted the character to be. Pratchett was also stymied by the games industry's culture of secrecy, in which her status as writer was held back due to a planned marketing

roll out (Yin-Poole, 2017). When her involvement was finally announced she had the chance to

respond but reframing the issue after weeks of storming controversy proved impossible. Indeed, a

cynical reading might see Pratchett's announcement as writer, and her wide exposure to the press

as an interviewee,[133] as damage mitigation following the crossroads controversy. It's clear from her

many interviews that Pratchett is genuinely passionate about advocating for both better writing and

better representation in videogames, and the fact that she was principally the one to have to defend

the game in the public eye after this publicity misfire indicates yet another way well-meaning calls

for positive change can be instrumentalised by the industry to fend off criticism and protect the

publisher's bottom line, not to mention a material example of a form of risk being offloaded onto a

precarious worker rather than being directed at the executive level or the marketing team that

largely caused the issue. The instability, and responsibility, imposed on the writer in such a dynamic

environment emphasises the extreme precarity of the position and requirements of flexibility, the

watchword of the neoliberal gig-economy, demanded of the role; and has led Pratchett to liken

writing for videogames as, "like writing a movie while the movie is being shot at the same time"

(Pratchett quoted in Takahashi, 2016).

Pratchett's response talking to Wesley Yin-Poole at *Eurogamer*, after her involvement had been

announced following the scandal, was that Rosenberg had taken this idea of protection from

"playtesting feedback," (Pratchett quoted in Yin-Poole, 2017), and she reiterated this in my own

interview saying:

> Well I think that was actually based on genuine feedback from our play testers, who sort of
>
> said, 'I feel like I want to protect Lara. I don't feel like I am Lara, I feel like I'm on a journey

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[133] As the games editor of a small circulation arts and culture magazine in East Anglia I attended an event in London where several such outlets had access to Pratchett, which demonstrates this uncharacteristically broad exposure.

with her.' That's totally valid! … Just because our play testers are saying that, that doesn't mean that's just what it is for every player. [RPR26]

The desires of the narrative team, which Pratchett was already at a remove from by dint of her status as an off-site freelancer, is here placed in tension with even the quality assurance (QA) testers who, despite generally being seen as the most expendable and precarious role in game development, were utilised by publishers to align more with the average player then the narrative team. The way Pratchett frames this tension recalls the ludology/narratology debate, setting up a potentially inconsolable tension between needs of player and needs of narrative, which is here materialised in a specific relation between the narrative and testing departments:

But writers don't have control over the game play, and how much gameplay there was. All we could do was fight our corner. But you are trying to balance the needs of game play and the needs of players. We have play testers say, 'we've got a gun, we want to use it.' It's a difficult situation, do you go against what your players want for the needs of narrative, or do you give them what they want and allow narrative suffer? [RPR14]

Nor are play testers solely able to influence gameplay, indeed the influence their feedback has over even directly narrative issues is demonstrated by the fact that they prompted a complete rewrite of the script "at the eleventh hour" because QA felt the ending was too bleak (Pratchett quoted in Yin-Poole, 2017).

Through their primary function as on-site players QA testers, then, not only serve to spot bugs but significantly play into market research frameworks by simulating within the studio a tangible microcosm of the external and abstract audience. In her work on television audience Ien Ang makes the statement, following Raymond Williams' assertion that the masses do not exist only "ways of

seeing people as masses" (Williams, 2017, p. 289), that "in a similar vein, 'television audience' only

exists as an imaginary entity, an abstraction constructed from the vantage point of the institutions,

in the interest of institutions" (Ang, 1991, p. 2). The same is of course true of videogame audiences,

which are regularly constructed and homogenised by industry reports and in the marketing

departments of studios, whilst only bearing a passing resemblance to the nuanced, subjective

experiences of real audiences. This has been show in Shira Chess' (2017) work on the construction of

the female gamer as a 'designed identity'.

Like the role played by Gitlin's test audiences in prime time television discourses (1994, p. 30), they

allow publishers (and marketers) the ammunition to enforce production changes, often over-ruling

other actors who should seemingly have a better claim to the solution, given their specialisms (like

Pratchett as experienced writer), without having to embark on actual costly market research. Just as

Latour argues that the laboratory for Pasteur was a means to bring the chaotic external conditions of

the French farmyard into controlled conditions, so that the microbe could be worked upon

(domesticated even) by "[snatching] the disease from its own terrain and transplant[ing] it into

another" (1993a, p. 63), the abstract player in the wild is corralled into the studio/laboratory to be

worked upon via this QA/marketing assemblage. This translation of the outside to the inside (of

reception to production) not only allows the game studio to domesticate the audience, but to

intervene in the networks of power Pratchett alludes to above and, as creative managers, pull rank

over creative workers themselves by claiming a greater knowledge of the market. The QA

department then is evidence that the videogame and its technological context is not the only thing

that is created in the studio – along with it, and preceding the game's release even into Kline et al.'s

publicity circuits, the proto-audience is formed in the interconnected circuit of the QA and marketing

department.

Following ANTs commitment to "follow the actors" in order to see how they build value and meaning in their interactions, we can clearly see that Pratchett is an important influence on the game within the discourse that surrounds it, even if her material involvement in the project isn't as direct as a notion of her as an auteur might suggest. Furthermore, the crossroads incident demonstrates several things that are pertinent here. Firstly that large AAA projects are formed through a long and complex process of negotiation between many different actors with competing visions for the direction the product should be pushed and its dominant meanings and competing ideas of the audience (whether it serves male power fantasies of narratives of female empowerment). Further these tensions play out in diffused networks of power, where developers working directly upon and with the meanings being deployed into the text have their intentions undercut (or overcoded) by more distant executive figures attempting to shape the overall meanings of the text for its transmission in conventional systems of play within the industry spiral (Dymek, 2012). Pratchett's own claims over the meanings of the game are diffused, if not outright set aside, by her status as a freelancer a potent illustration of the trade-off between power and freedom that she alludes to above.

CONCLUSION

The above discussion of Pratchett's role within the networks of production demonstrates not only the dispersed and displaced nature of creative involvement in large scale videogame production, but illustrates the vitality of actor-network theory and the semi-structured interview methodology (accompanied by interface ethnography) in picking through these connections in order to trace the flow of value and ideas through what is becoming the increasingly complex and large-scale process of game development. To go back to Cadin and Guérin's suggestion that innovation is more often pursued by "marginalised actors," who have a disruptive influence on the production process because they are lacking the "constraints" of "customary ways of doing things" (2006, p. 249), we can begin to see here that in spite of Pratchett's centrality to publicity discourses, in practical terms

there are many constraints that paradoxically render her position marginal in the process and disempower her. Such a hierarchy gives lie to the rather fanciful notion that still persists in some quarters that game development structures are flat, close-knit and egalitarian (a particular interest of the following chapter).

Rather than reducing a complex process down to the perspective of one individual (the result of auteur theory), the ANT approach allows us to analyse the complexity of the network through isolating a specific node in it and tracing outwards. Such a study of the translations of ideas through real embodied power relations reveals in real terms the theoretical tension that cultural industries theorists like Hesmondhalgh and Banks see as fundamental between creativity and commerce. Indeed, according to Banks the creative cultural worker is an important unit within this larger system, functioning as an "axis point of political struggle between the forces of art and commerce," and such a worker, "must most evidently balance the desire to indulge in disinterested, creative self-expression against the necessity of accumulation" (Banks, 2007, pp. 8–9).

But such specific embedded examples at the level of the studio are ultimately contained within a wider context too. In order to demonstrate this I have used John Caldwell's concept of 'trade stories,' the professional discourses that circulate in the form of documents and oral storytelling structuring a community of practice and stabilising its values (2008a, p. 37), in order to unpack several myths identified by O'Donnell that relate to popular and romanticised perceptions of game industry practices (2014, p. 148). Through a critical reading of such myths I have revealed some of the key structural characteristics of the games industry and its points of convergence and divergence with general political economy theorising of the cultural industries, and in so doing have demonstrated the point made above that the industry can be understood as at the bleeding edge of post-Fordist restructurings of the workplace in the current regime of information capitalism. Such a

contextual picture illustrating the complexity of videogame production networks provides a crucial foundation for the chapters to follow that move the focus onto the indie sector.

Whilst the introduction demonstrated the centrality of the ludology/narratology debate as a discursively structuring feature or a kind of material engine in creation and delineation of game studies as field, the manner in which Pratchett negotiates the tension between story and gameplay in material contexts of production in this chapter, suggests that this dialectic is also a structuring discursive characteristic of the production context itself. Just as game studies left the debate aside, the videogame industry has picked it up. In the last decade the AAA games industry has enshrined narrative at the heart of the gaming experience. The tension between the ludic and narrative aspects of videogames is once more at the heart of this debate, only this time the need to resolve the issue has become all the more urgent because doing so may lead to more successful (and profitable) games. This can clearly be seen as a result of the tendency in criticism around the recent Tomb Raider reboots that point out the discrepancy between what the games are trying to be about in their narrative ambitions (the emotional story of Lara's origins and how she is made to kill in order to survive) and what the player does in the game play (making Lara gleefully murder hundreds of assailants in increasingly violent ways) (Ellison, 2012; Lejacq, 2013; Sims, 2013). This is an example of a concept from Clint Hocking called ludonarrative dissonance, which gained a large amount of traction in journalistic discourses of games at around the time the Tomb Raider reboots emerged, and provides a tangible example of how a piece of industry theorising contributes to larger critical discussions and potentially impinges on the profitability of the game.[134] Pratchett herself found such a discourse frustrating and wondered if Tomb Raider, given its high-profile nature, hadn't been singled out for special criticism:

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[134] Although it might be too much of a stretch to attribute *Tomb Raider*'s relatively poor commercial performance (Phillips, 2013) to such dissonance, the discussions surrounding the game were so pervasive and so negative I cannot believe they didn't contribute to material sales in some way.

I often ask journalists this, 'OK what highlighted that to you? Is it because we gave her, you

know, some emotions and feelings about what she's doing?' We weren't the first game to

put some emotions in there... you know maybe when it comes to Lara. [RPR10]

For Pratchett the tension between crafting a believable and emotional story and meeting player

expectations in terms of gameplay is particularly difficult in a medium like games and a genre like

the FPS which is built upon violence and power fantasies, making it "very difficult to marry any kind

of character to that kind of violence and action that you would get in games really, because games

have their own sort of curve that's very different from movies" [RPR13]. But the challenge of such a

task did not result in Pratchett throwing in the towel, and in discussing the sequel to the reboot,

which she also worked on, she feels that "we sort of aligned the character and game play a little

more tighter" [RPR9]. Regardless of whether such ludonarrative dissonance is possible to overcome

in a AAA FPS game, the games industry is endeavouring to overcome the problem through industry

theorising. Indeed, they are treating this just like any other engineering and aesthetic problem to be

overcome, just like the myriad others they deal with on a day to day basis, but rather than prioritise

one over the other the attempt is normally framed by an attempt to reconcile the two.

I have shown here how storytelling and industry theorising always occur in such contexts of

informational capitalism "where innovation driven and deregulated economies lead towards the

adoption of flexible and outsourced work" (Guevara-Villalobos, 2011, p. 3). It is within such

structures that narrative circulates in the form of trade stories, determining and perpetuating the

game industry's mythical self-perceptions. It is also within these wider structures that the interviews

conducted with game developers must be couched to appreciate the tensions between narrative

intent and the many constraining factors that dictate how narrative flows into a game. For example,

in order to understand how interstitial narrative directors act as creative managers to regulate the

flow of ideas from fragmented writing teams to the final product, in the process blurring the

dimensions of work and play, as well as the tension between creativity and commerce.

But Caldwell demonstrates that trade stories don't always have to serve managers, for instance

against-all-odds narratives can also serve to maintain the machismo of the industry and a sense of

working-class struggle and union solidarity so often "threatened by displacement and obsolescence"

(2008a, p. 43). As a consequence, trade stories, whilst revealing of an ideological position or of

power relations within a given network, operate in often complex ways as they are claimed by

various actors for different ends, and this can clearly be seen at work in the circulation of meanings

around Lara Croft in the *Tomb Raider* reboot. What is ultimately at stake in these discursive struggles

is the kind of narratives that games can embody and the kinds of creativity that designers can

express within current industry structures. Having sketched out the characteristics of the games

industry I am able to assert my principle claim in this study that the text of the game is largely

dependent upon the material arrangement of the text of the 'studio' which is the subject of the

following chapter.

Chapter 3: 'Breaking Out Stories': Intentionality and Interdependency in the Indie Sector

In the last decade independent, or as I prefer 'indie games', have increasingly become a centre piece of industry discourses; featuring prominently on stage at high-profile spotlights such as Microsoft and Sony E3 press conferences, regularly garnering acclaim at award ceremonies like the BAFTAs, and continue to be covered enthusiastically by games journalists. However, considering the prestige and cultural penetration of such games, outside of a few scattered publications (Grabarczyk and Garda, 2016; Jahn-Sudmann, 2008; Juul, 2014; Martin and Deuze, 2009; Ruffino, 2013; Simon, 2013) the indie sector is vastly under analysed in game studies. Indeed, in the editorial to a special issue of Canadian game studies journal *Loading…* Simon Bart suggests that game studies has been 'blindsided' by the rapid emergence of the indie scene, noting that the shortfall reveals a significant failing of games academia which has a tendency to "play, think about, and write about the games that are popular in the mass culture sense of the term" (2013, p. 1). However, there is ultimately more at stake here than the inability of game studies scholars to keep pace with a rapidly changing industry. I would also argue that the indie sector, its products and its work practices fundamentally disrupt not only industry models (as explored below), but many of the academic models that have been carefully built up in the opening decades of game studies as a discipline. Given this the neglect of indie titles can be thought of as another indicator of the prevailing orthodoxy of the field. The study of the indie sector, then, is not only urgent for the extent of exploring its challenge to prevailing aesthetics, normative player models or conventional perceptions of what constitutes a game text; but fundamentally also challenges those same categories within the discipline of game studies.

Study of the growth of the indie sector is vital because it appears to foreground significant shifts in modes of consumption and production, creating a crucible in which new identities are being formed and old ones undermined or reconfigured in ways that often challenge the norms of the medium.

Indeed, discourses circulating around the indie sector in the popular press, which must always be tacked with a pinch of salt, characterise it as a source of absolute freedom and creativity (Diver, 2016; Orland, 2011). Although the dominant AAA industry continues to consolidate into fewer and fewer more powerful publishers in response to these new factors, its centrality has been considerably challenged by many of these newly emergent modes of production, which each carry with them new ways of working (for instance, so-called Agile methodologies), new ethical questions (labour organisation and workplace diversity), and new upstart genres (the walking sim explored in the next chapter).

The paucity of academic work focused on the indie sector is torn on exactly how its independence should be understood (Grabarczyk and Garda, 2016; Lipkin, 2013; Ruffino, 2013). Some scholars have seen it in purely aesthetic terms as a particular nostalgic return to a craft aesthetic (Juul, 2014), or via the notion of artistic expression (Parker, 2013), as a challenge to the dominant norms of AAA production (Della Rocca, 2013; Whitson, 2013), as an opportunity to intervene into normative modes of play and production in order to build an alternative community (Fisher and Harvey, 2013; Gouglas and Rockwell, 2013), or even as an engine of innovation that can feedback into and introduce change to all levels of the industry (Martin and Deuze, 2009, p. 284).

But regardless of its ambiguity, there is no denying that indie has developed into a vast discursive terrain in games industry conferences like the Game Developer's Conference (GDC) held each year in San Francisco and Develop held each year in Brighton, and is debated, discussed and redefined ad-nauseam in games journalism outlets (Douglas, 2018; Dutton, 2012; Kogel, 2012; PC Gamer Staff, 2019), coffee table books (Diver, 2016), industry blogs like *Gamasutra* (Fedor, 2011; Gril, 2008; West, 2015)*,* and documentaries (Beth, 2014; Swirsky and Pajot, 2012), not to mention that recent reports suggest that as much as 95% of UK games industry companies are considered small or microstudios (UKIE, 2016). My attention to this increasingly vibrant sector of the industry, therefore,

provides a corrective to its neglect, although it must be stressed that my intention is not to set up a

simplistically dichotomous moral relationship between 'bad' commercial and 'good' independent

processes, a trap all to easily fallen into even for experienced ethnographic scholars as attested by

Sherry Ortner's (2013) study of the independent film scene in *Not Hollywood.*

In spite of its thoroughness of method, there are moments in which Ortner seems to succumb to the

undeniable excitement, dynamism and counter-cultural rhetoric that often marks independent

forms of cultural production as they couch their efforts in opposition to the establishment. Although

the previous chapter argued for the impossibility of true objectivity for the researcher, who after all

is always part of the networks being constructed, a danger occurs when researchers get so invested

in their subject that they begin to express the oppositional attitudes of independent directors not as

a discourse to be analysed but a stance to be celebrated:

> But insofar as one is sympathetic with what they are trying to do, it does not make sense to
>
> deconstruct and demystify them as if they were Hollywood movies. Rather, the effort must
>
> be to figure out how and in what ways they are constructing themselves as critiques of, and
>
> alternatives to, Hollywood and the dominant cultural order. (Ortner, 2013, p. 10)

Although Ortner admits that as products of American culture independent films "are themselves full

of unexamined elements of the dominant ideology" (Ibid.), she still urges that they be treated in

qualitatively different ways to Hollywood films as works of criticism themselves. It may well be true

that independent films are more sophisticated and critical than their mainstream brethren, but

there seems something predetermined about this approach to research. As a consequence, what is

discursively produced as a means of independent filmmakers to understand and actively construct

their relationship to the commercial industry of Hollywood, is at times taken as a truthful and real

account of the structure itself. Although I intend to develop an argument that seemingly shows indie

developers subversively speaking back to the centres of the industry from their margins, I maintain

that there is a danger that rests in artificially separating indie off from the rest of the industry by

positioning it as its absolute 'other', in much the same way narrative has been artificially separated

from the ludic core of videogames (and the core discourses of orthodox game studies).

The complex issue of what constitutes the independence that 'indie' alludes to is the specific subject

of this chapter and should be understood as part of the discourse produced by the indie scene itself

as it attempts to define itself vis-à-vis the AAA industry. Such a discursive approach tempers the

polemical relation Ortner sees in independent film, because ultimately indie is always still a part of

the thing it critiques – indeed, that connection is vital because if it didn't exist the subversive

activities of the indie scene would not be able to be slowly folded back into AAA practices as I argue

it is being throughout this thesis. Keogh argues that what he calls 'informal videogame development

practices', that are most apparent amongst the microstudios and individuals that make up the indie

scene, should already be considered a core part of the industry since most games are already

produced in such a hybrid space: "mundanely, precariously, and across intensifying networks of

professional and amateur labour" (Keogh, 2019a, p. 16). In light of this observation regarding the

increasing ordinariness of practices on informalized games work (as shown in the precarious image

of the industry sketched I the previous chapter), I claim here that the indie sector should be thought

of as 'interdependent' rather than independent from the wider conditions of the industry.

Whilst academia grapples with the contradictions and nuances of the term the specialised gaming

press has typically been more forthright in its optimistic and often utopian vision of indie. For

instance, this is encapsulated in a widely circulated coffee table publication claiming to be the

'complete introduction' to the topic. Here veteran games journalist Mike Diver crystallises what has

long been a dominant interpretation of indie games in the public perception; a place of pure,

unconstrained creativity that presents a radical challenge to the dominance of the games industry. It is worth quoting at length:

> It's in the indie sphere where the genre traits and tropes are unshackled, mangled, remoulded. Here, reduced manpower and money represent no limit to imagination. It's a space of near infinite possibility, manifested most frequently through digital distribution – cheap, reliable and direct to the homes of the consumers. It's a scene alive with excitement, driven by unstoppable momentum, rarely pausing to look back at past successes with the intention of replicating them in a shinier, slightly louder new-gen render – something that can't typically be said for those mammoth teams working on yearly iterations of gaming's biggest-selling franchises. (Diver, 2016, p. 8)

The claims made here by Diver in terms of the breaking and reconfiguration of genre conventions are all the more pertinent in light of my argument around the hybridisation of genres into the open world action/adventure that dominates the AAA sector (an example of which can be seen in the Tomb Raider reboot). So it goes that in the AAA sector genres and conventions are homogenously bought together and standardised under conditions of incremental iteration, whilst in the indie sector they are supposedly smashed in the revolutionary spirit of true innovation. Such idealistic discourses have led to the somewhat artificial conceptual separation of the industry into two autonomous spheres, emblematic of a desire for creatives to overcome the creativity/commerce dialectic explored I the previous chapter by jumping ship, and is characterised as antagonistic and mutually exclusive as suggested by the documentary *Us and the Games Industry* (Beth, 2014). Crossing this perceived divide recently became hugely desirable for a generation of creative labourers who, like workers in other industries such as television (Hesmondhalgh and Baker, 2011) and fashion (McRobbie, 2016), had largely entered the industry to exercise their creative autonomy only to find it stifled by rigidly defined roles within hierarchical companies.

Whilst the previous two chapters have explored some of the structural characteristics of typical AAA studios (Creative Assembly and Crystal Dynamics) utilising Actor-Network-Theory, such a focused study inevitably results in a synchronic snapshot of a particular moment of a particular structure (its sociogram and its technogram). In order to truly understand the relationship between indie and the commercial industry the temporal dynamic must be appreciated as much as the spatial. Couching ANT within Foucault's geneological approach to historical enquiry (1991a), discussed in the introduction, and Williams' cultural materialist approach to hegemonic formations (2003) will help to reveal the material realities of such fraught and tenuous trajectories.

Indeed, its inability to deal adequately with the temporal dimensions of the network is a known issue in ANT. For instance, in applying the framework to the historical development of the museum, Kevin Hetherington reflects that "the idea of heterogeneity for ANT is problematic because we see that 'heterogeneity' is historically constituted and time has been something of a blind spot for ANT with its emphasis on spatial relationships and distributions such as in the metaphor of the network" (1999, p. 52). Since my argument also rests on a discussion of the heterogeneity developed by the emergence of the indie scene, this issue must be dealt with. Georgina Born provides a solution in her adaptation of the method. Born criticises Latour, who despite constantly claiming the importance of the actor's own perception, rarely starts from their own ontological understanding of culture, resulting in lack of "understanding of this temporal situatedness", and although this helps avoid claims of determinism has the danger of suggesting meaning emerges "ex nihilo" (Born and Wilkie, 2015, p. 146). Her approach is to first "understand the actors' own genealogy," then to "trace the actors' temporal ontology" in term of how they themselves "construct cultural-historical time," and finally to assess "the actual output of creative practices" in order to compare it to these self-professed claims (Ibid., p. 149). Rather than being transcendent, the image of time that emerges here is seen to be a product of the assemblage in question, which returns us safely to the grounded,

actor-led values of ANT. Indeed, Born's approach is so relevant to our specific study of creativity

since she recognises the particularly ambivalent role such a process plays in commercial contexts

where: "difference is wanted, but it's difference that conceals itself, by folding itself into the

ongoing, self-propelling constellation of the genre" (Ibid., p. 150).

Whilst Foucault's genealogical approach to history and Born's tweaks to Latour help us to situate the

indie sector within the shifts of the cultural fabric, its specific relation to the dominant centres of

the industry, I maintain, are best understood using a set of theories from Raymond Williams, which

provides an excellent means of assessing shifting power dynamics between different parts of the

network over time. One of Williams most important contributions to the study of culture is his

notion of dominant, residual and emergent structures, which distinguishes what he calls a simple

"epochal analysis", a synchronic approach that looks at units of history as discrete autonomous

periods of time, from an "authentic historical analysis" (2003, p. 121), a nuanced diachronic

approach that appreciates social periods as complex, overlapping entities. In any given moment

these three categories describe a unique, historically and socially contingent set of influences at play

within a given cultural formation. The dominant social structures (in Williams class based focus being

capitalist society) must preserve themselves from threats from both residual (former dominant

structures such as religion and monarchy) and newly emergent social forms consisting of "new

meanings and values, new practices, new relationships and kinds of relationship" (Ibid., p. 123). The

acknowledgements of 'relationships' here is crucial, since it shows how such emergent entities can

still be understood as protean actor-networks, held together by relational links that strengthen and

extend as they move from the emergent margins to the dominant centre.

The strategies the dominant regime undertakes to defend/enhance itself involve processes of

incorporation "by reinterpretation, dilution, projection, discriminating inclusion and exclusion"

(Ibid.), issues that will be discussed below in picking apart the complex interrelations of AAA and

indie practice. To this end, I develop the notion of the 'breaking out story', as opposed to

O'Donnell's breaking in story, discussed above, as an industry narrative that illustrates the dynamism

of this relationship. I argue that rather than a kind of resume that the breaking in story accounts for,

the narratives developed by designers as they leave the mainstream industry form a kind of farewell

note (or a Dear John letter), since they engage in a direct and reflexive way with the new material

conditions they find themselves in, discursively creating a newly oppositional dialogue with the AAA

industry, which ultimately helps to construct the notion of indie as well as AAA. To illustrate and

ground the discussions further, the chapter ends with a reading of *République* (Camouflaj, 2013) as a

specific manifestation of such a narrative. In this chapter, and using these examples, I develop a

notion of the indie studio as the temporary point of convergence of a number of specific trajectories,

mirroring and giving credence to the larger notion of the indie scene as a moment of transition for

the industry at large. In doing so I build upon emerging work in studio studies (Farías and Wilkie,

2015), which seeks to apply the insights of ANT to the notion of the studio as the key site of

creativity in modern culture.

TOWARDS A GENEALOGICAL HISTORY OF INDIE

There is now an ample body of writing discussing how the homogeneity of the industry and the

uniformity of its products is starting to give way to heterogenous new arrangements of diverse

voices including a growing collective of queer and female players who do not align so comfortably

with the hegemonic model or its key works (Chess, 2017; Juul, 2012; Ruberg and Shaw, 2017b,

2017b).[135] Ruffino proposes that the result of this influx of new voices, manifesting most clearly in

the rise of the indie scene, is the disruption of the industry and its products as stable objects, and as

a consequence, the destabilisation of the hegemonic paradigm of the gamer, which has been

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[135] Although this by no means suggests that such groups can't or don't play such games, but they do so with a problematic and other-marked relation to the dominant audience, as studies of all-female FPS clans like The Frag Dolls and PMS (Psychotic Men Slayers), expressly constructed as exceptions from the norm, have aptly shown (Newman, 2004, p. 56).

historically created and maintained through them (2018a, pp. 14–15). The industry is thus pitched

between the seemingly contradictory desire to appeal to a reliable, hardcore fanbase with

predictable if demanding tastes, or to explore new ludic and narrative formations, even while it is

grudgingly resisted by the hardcore player base who continue to perceive incursions from the casual

and mobile sectors (collectively often dismissed as 'casual' games) as a threat to their traditional

values. As Shira Chess has argued:

> "Casual," the terminology as well as the technology, has politics. The term itself implies a
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> group of dilettantes who do not require the dedication or the skills to necessarily be real
>
> gamers. Similarly, the GamerGate movement suggests that the advent of casual gaming (in
>
> some part) has created a giant, industry-wide rift. In these ways, the space of "women's
>
> games" remains both stereotyped and marginalized. (Chess, 2017, pp. 15–16)

There is a sense of crisis developing around a growing perception of a bifurcation in games

production between a consolidating commercial formation and a fragmented series of breakaway

factions including social, casual, and indie game development.

One of the functions of ANT is precisely to trace such indications of mediation, which include

disruptive moments: "a bifurcation, an event, or the origin of a new translation" which ultimately

"render the movement of the social visible to the reader" (Latour, 2005, p. 128). The industry split

modelled here by Merel is a moment of industrial theorising around a crisis; an inflection point that

creates a schism that opens new discursive terrains , and the divergence he notes can be understood

as a translation causing a bifurcation in the network. Ideas of group formation in discourse analysis

and ANT can help us to see how such networks of actors, whether core or casual, hold together to

exert such an influence as the above industry bifurcation suggests. Games, like all popular cultural

objects (Storey, 2018), can be seen as a vital site through which large groups of actors, either

through the processes of consumption or production, come to articulate their social and intellectual identities and form their ideological frameworks.

Indeed, this was a burning issue on the minds of many in the games industry itself on the eve of the launch of the eighth, and most recent, console generation. Industry analysts such as Tim Merel, founder of Silicon Valley oriented consultancy firm and investment house Digi-Capital, released articles (Merel, 2012, 2011) into the specialist games media and sites of industry discourse such as *Gamasutra* arguing that the market was splitting into a divergent 'V' shape along the lines of format (console value vs mobile volume), user base (value vs volume), business model (retail unit sales vs ad-supported free-to-play), audience/market (the West vs emergent markets in China, India and Brazil), and that such a divergence was putting pressure on the traditional modus operandi of platform holders. Although the situation is clearly more complex than this simple model implies, the image becomes a convenient heuristic and a rhetorical device to powerfully capture the broad trends of the industry, but crucially also reveals the industry's own reflexive understanding of the situation as a piece of industry theorising.

Whilst the two prongs of the 'V' initially appear to apply a dichotomy, pitching two intractably opposed processes across a gaping chasm (hardcore gamers vs derided casuals), the point at which the V meets on Merel's graph can be seen as the point of tension and struggle over what games are or could be between these two extensive user groups. This crisis has only intensified in recent years as the companies with the requisite amount of resources to create a AAA videogame (let alone a new IP) is concentrated in fewer hands thanks to increasing production costs (Maiberg, 2016) and industry consolidation following the continuing fallout from the 2008 financial crisis and its legacy of recession – continuing a process of oligopolistic consolidation of the industry around a few big

studios (Kline et al., 2003, pp. 171–172).[136] Watching any of the major E3 press conferences, but especially those of the major platform holders who find themselves at the epicentre of this crisis due to their central role in initially defining the audience for their consoles, reveals a complex discursive strategy of simultaneously reaching out to new audiences, by addressing values of accessibility and community; whilst simultaneously reassuring traditional fan-bases, by focusing attention on tent-pole releases defined by core gamer tastes.[137]

This discursive split was all the more obvious in the 2012 E3 press conference, in which Sony relied on radically new properties from independent designers based on untested formats and technologies: *No Man's Sky*, developed by small-scale British developer Hello Games; and *The Witness*, developed by Jonathan Blow, arguably one of the key pioneers of the indie sector. Giving extensive stage presence to small developers at the industry's most expensive spotlight events was previously unheard of and caused much chatter amongst games journalists. But this strategy was also essential, given the typical dearth of content at the beginning of the console cycle, which presented an opportunity for indie developers to manoeuvre into the spotlight. Steve Gaynor sees this increasingly luminous spotlight for indie as somewhat inevitable industry shifts, in language that recalls Keogh's cycles of formalisation and informalisation he says "it's an ebb and flow kind of thing… We made Gone Home and then a couple of years later I got to come out and introduce our next game at the stage of Microsoft's press conference at E3" [SG30].

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[136] Evidence of the middle dropping out of the industry became greatly apparent to industry commentators when THQ, which had typically been conceived as a double A (AA) publisher since it operated at scale but not with the huge budgets of its larger brethren, collapsed into bankruptcy and dramatically hammered home the precarious nature of the industry (Lien, 2014). Meanwhile the auctioning off of its intellectual property demonstrated one of the vectors through which such consolidation of ownership occurs.

[137] A recent example of such tensions coming to a dramatic head can be seen in the notorious headline announcement of Blizzcon, Activision-Blizzard's hardcore fan convention. Expecting the announcement of the next instalment of hardcore RPG and fan favourite Diablo, fans reacted with astonishment and rancour when the centre-piece game was finally revealed to be a 'casual' mobile game based on the franchise (McWhertor, 2018). Such a PR bungle was impossible to contain and was a potent demonstration of a studio unable to split the difference between its hardcore fan base and the more mainstream audience it was attempting to court, as well as a reminder of the high stakes and passions of the actors involved.

Such press conferences can thus be seen as points of translation, where tensions between different audiences and different futures for games play out. It also gives a dramatic concrete example of the industry spiral, in precisely how a major platform holder like Sony sets the discourse at the transitional point of a new console generation, by seeking to reach out to new demographics of players. Mikolaj Dymek's industry spiral model, in which powerful actors set the agenda for smaller developers downstream based on feedback from retail, supports Merel's view (another interesting convergence between industry and academic theory), suggesting this crisis manifests in the splitting of the audience between the traditional hardcore demographic and larger mainstream demographics that are being actively courted by the indie, mobile and casual gaming sectors with their lower bars of technical expertise (many of the games are available on mobile phones or PCs, rather than expensive bespoke console hardware) or gameplay competencies required (many of these games have very simple controls and accessible gameplay).

The inclusion of the indie sector on the hallowed E3 conference stage is certainly disruptive moment for dominant models of play, but it confirms the industry spiral is functioning as intended, since it is a change in the agenda initiated by a major platform holder at the start of a new cycle. Further evidence of the smooth operating of the commercial games industry to adapt to new market realities can be seen in how Ubisoft, one of the major studios, quickly conformed to the expected pattern by following Sony's lead; forming small internal development teams to generate titles like *Child of Light* (2014), *Valiant Hearts* (2014) and *Grow Home* (2015), which evoked the aesthetic style, scale and experimental nature of a typical indie game. In addition, Square-Enix, another major publisher based this time in Japan, also set up a subsidiary in 2016 called Square-Enix Collective to provide publisher support (and profit from) the wealth of emerging indie talent. Small developers were undoubtedly buoyed by these moves on the part of the dominant parts of the industry in embracing the indie spirit in an unprecedented move to appeal to new audiences, indicating that the

industry itself might be pivoting. If, as Dymek claims, the industry spiral had gotten the industry into the bother it found itself in, by catering for so long to a now saturated subcultural audience of hardcore gamers, this demonstrates that tweaking the angle of the industry spiral towards new opportunities might also provide the means to slowly extricate itself from the crisis.

The bifurcation was also discussed by developers in my interview corpus, for instance Pinchbeck refers to his own 'small scale' development in opposition to the commercial framework. For him his work, *Dear Esther* (The Chinese Room, 2012), which began life as an academic project was able to transition to a commercial product (and allow him to found his studio) because it "coincided with the indie explosion," and as a result "suddenly there was a route to market for very small projects and small teams", that has ultimately "changed the kind of landscape" of game development [DP9]. For Greg Kasavin, founder of the studio Supergiant Games which created the indie break out hit *Bastion* (2011), there has been a discernible shift in values to a greater diversity of experience in the industry which is not only manifest in the "kind of content that's depicted in games" but has produced a "much wider variety of types of games today than… 15 years ago when it was more console dominant… and more like sort of so-called AAA studio dominant, and these days there are just many more smaller studios making different types of games" [GK6]. Further, for him, this has contributed to (or at least gone hand in hand with) the fact that "quality of the craft in storytelling in games has on the whole improved" even in games from larger studios like Naughty Dog [GK7], suggesting that AAA storytelling has also had to up its game in light of new developments. Lucas Pope, the one man developer of several innovative games including *Paper's Please* (Lucas Pope, 2013) and *The Return of the Obra Dinn* (Lucas Pope, 2018), is even more explicit on the subject of AAA learning from indie, suggesting the kind of flow of ideas that I am interested in here:

> The experimentation you see in the indie games, or the games that don't have a lot riding on
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> them, but that percolates up to the AAA guys. You know people from Indie go to AAA, or

they see that they enjoy these games they were playing at home and they want incorporate

elements of that into their AAA title, and so that sort of takes over, and I don't mean to say

that straight up shooters are not going to be going to disappear. It's like music, you just keep

adding branches on the tree. [LP29]

This mutually co-constitutive innovation isn't just an opinion shared by indie developers, who we

might expect to be more oppositional to the mainstream industry (especially if we think of them as

parallel to the independent film communities Ortner has explored), but also those working in the

AAA field. For instance, Dion Lay, the narrative director of *Alien: Isolation* shared with me the same

optimism around the growing narrative diversity of the industry and how indie and AAA now existed

in a somewhat symbiotic relation:

So they kind of feed off each other. Indie games get a lot of room to experiment and then

AAA games can see that it works and that they can do it. I think there's a big snowball effect

that encourages people to make those stories. [DL57]

What is not readily apparent here, or indeed in any of my interviews, was any evidence of an overtly

antagonistic attitude, suggesting that if an industry split is theorised by industry analysts (Merel,

2011) or scholars (Whitson, 2013) it is not as apparent or as divergent in the discourses of actual

production cultures. Neither is there as much evidence as one might expect of the discourse of the

'indiepocalypse' that Lipkin (2019) suggests is now prevalent in some sectors of the industry. This

being a concept that suggests the indie sector has been irreparably flooded with low quality titles

that result in the decline in quality of games generally (Galyonkin, 2015; Rohrer, 2019; West, 2015)

and in the most extreme predictions will lead to a market crash as destructive as the one in 1983

precipitated by the fall of Atari. In my own (unpublished) research (Bowman, 2018) on this important

rhetorical form, delivered at the Develop Conference, I argue that discourses of the indiepocalypse

have typically been mobilised by reactionary gamers in an attempt to reject the indie sector as a threat to traditional gameplay norms, whilst developers mostly deny its existence or note how it is an exaggeration. Ultimately this ties into my thesis on considering indie and AAA as part of an interdependent network, in which context notions of the indiepocalypse would be unsustainable not to mention "quaintly irrelevant". As the above comments show, many innovative developers working in the industry rather see the indie sector, and its relation to AAA, as a source of the rise in quality of games rather than its decline.

Although indie is often framed as a completely recent phenomena, I hope to show here that it is both new and old; a specific manifestation of a set of processes that Brendan Keogh (2019a) has shown to be operating throughout the history of the game industry as it fluctuated between poles of formalisation and informalisation. Once more, ANT is a crucial method in helping us to articulate the often complex flows of power and influence between these two important poles of game development, since it attempts to approach structures symmetrically and agnostically, allowing the actors involved to speak for themselves and to steer the analysis, rather than starting with a preconceived notion of value applied from the top down. Brendan Keogh has recently begun this process by challenging our collective assumptions of the two domains as separate, suggesting that the corporate consolidation of the AAA sector and the manner in which the recent indie renaissance has been viewed in purely oppositional terms has blinded us to the complex intertwined destinies of these two aspects of the industry.

Keogh eloquently argues that the period roughly between the launch of the Nintendo Entertainment System in America in 1984 to the present, forming the modern console era within which the notion of the AAA industry and the rigidly hierarchical structure described by Dymek's industry spiral model formed, was one of 'intense formalisation,' in which platform owners and large publishers used their position as gatekeepers to rigidly control the network of production and distribution. This

consolidation of power served to perpetuate their place at the top of the hierarchy and to displace and discourage informal forms of videogame production. This has been the dominant structure of the industry for much of its existence, and has "normalised a cultural imagination of the videogame as consumer software driven by innovations in processing power and graphical fidelity, an increasing amount of content and scale, and limited to a finite number of action-centric genres" (Keogh, 2019a, p. 22). The emphasis on ever higher budgets and ever greater graphical prowess, resulting in ever larger development teams and reinforced by a cycle of generational upgrades to console computing power as critiqued by James Newman (2012), rather than a natural factor of the teleological forward momentum of the industry, can be seen instead as a deliberate form of gatekeeping; a way to keep the barrier to entry for legitimate videogames so high that only the biggest players can gain and retain profitability. Similarly, the growing risk associated with sky-rocketing production costs has led to the consolidation of gaming culture around the core gamer audience which had emerged alongside this formalisation (Keogh, 2019a, p. 22), thus the audience and industry are stabilised through the same mutually-reinforcing processes. Equally, the same seismic cultural and technological shifts that helped buoy up the indie sector – digital distribution platforms, accessible game tools and engines, the growth of game design education – also began to challenge the stranglehold of these gatekeepers, which ties into the now common claim that there has been a significant democratisation of the medium in both its audiences and production cultures (Anthropy, 2012; Chess, 2017; Juul, 2012).

The results of these transformations for Keogh is an "[erosion of] a once distinct line between 'amateur' and 'professional' videogame developers," leading to a recognition that typical neat models of linear publisher/developer market relations are no longer sufficient to account for the vast majority of games production, leading to a moment of 'intense in/formalisation' where the declining (yet still dominant) structures of commercial game development are colliding in a

multitude of ways with the ascendant (yet still precarious) heterogeneity of informal practices, resulting in hybrid situations that are creating new norms:

> This form of collaborative, networked videogame development that meshes hobbyist
> creative activity with the commercial ambitions and regulatory processes of the commercial
> industry is increasingly prevalent globally. (Keogh, 2019a, p. 15)

Keogh argues that such a complex and uncertain situation "demands a synthesis of top-down political economy and institutional analysis alongside the bottom-up orientation of cultural Studies" (2019a, p. 19), echoing a similar call made by Caldwell (2009), an answer to which I have sought to provide in this study, which is driven by such an approach. If we solely consider 'independent' to refer to an economic mode of production in which individuals produce and distribute games independently of a publisher, then such games have existed as long as computers (Parker, 2013, p. 41; Young, 2008), however recently the term has begun to be applied to a much wider array of phenomena, suggesting that rather than narrowly defining a mode of production it is being used as a heuristic generic category to describe a certain style of game, defined more by its difference from AAA formats than any external economic or intrinsic formal qualities.

Histories of the early games industry, before the consolidation of AAA practices, stress the anti-authoritarian hacktivist spirit of early game developers who appropriated mainframe computers at universities and private research institutions to make early games like *Tennis for Two* (Higinbotham, 1958) and *Spacewar* (Tech Model Railway Club, 1962). This mystique continues to exert an influence on hardcore game cultures, for instance the well-known biography of John Carmack and John Romero on the formation of id entitled *Masters of Doom* (Kushner, 2004), positively revels in the pair's romantic hacker origins (one of their earliest project was to hack *Mario* to work on PC) and anti-authoritarian business practices. Meanwhile the early commercial period in which home

computers and early consoles began to proliferate was shaped by the activities of bedroom coders

selling games in zip-lock bags as much as big companies like Atari (Levene and Anderson, 2012;

Poole, 2004). Experimental and lo-fi works by such figures as Jason Rohrer (Maizels and Jagoda,

2016) and Anna Anthropy have always been produced at the very periphery of the industry along

with more overtly artistic works in gallery contexts[138] and have typically been released on the

creators own websites or niche sites like *New Grounds*, *Kongregate* or *Itch.io*. However, what

distinguishes these more marginally historical and artistic modes of independence from what I refer

to here as 'indie' proper, is that these newer works are now often commercially distributed on the

very same digital marketplaces that AAA games are (and often with involvement from AAA actors).

This has resulted not only in a significant growth in the indie scene and a shift in its character from

what some have identified as a lo-fi and retrograde aesthetic (Juul, 2014) to a semi-professional

polish, with indie works moving discernibly closer to the centre. This convergence has spawned

many puzzling hybrids, and the coining of some bizarre terms such as 'Double A' or 'Triple I' in order

to classify this hybrid mode of production (Handrahan, 2018), leading to much confusion amongst

practitioners and academics over what even constitutes indie.

We now have an arrangement where established AAA companies like Ubisoft are forming their own

internal divisions to mimic indie aesthetics and processes, creating games like *Valiant Hearts: The

Great War* (Ubisoft Montpellier, 2014), which in terms of aesthetic, scale, and theme seems to run

counter to dominant industry forms that Ubisoft itself pioneers (Meikleham, 2017). Meanwhile,

whilst indie was typically understood to mean 'without a publisher', now so-called 'independent

publishers' like Devolver Digital, and Versus Evil have emerged to promote and sell portfolios of indie

games. Alongside these new entrants are a range of other actors, including more established indie

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[138] For instance, those radically subversive games produced by new media artists like Anne-Marie Schleiner (2002), Cory Arcangel (2002) and Eddo Stern (Schwendener, 2015), who appropriate elements of the videogame form and recontextualised them in gallery contexts (Parker, 2013) or as moments of what Alexander Galloway (2006) calls 'counter-games'.

developers like Chucklefish, who found success with their procedurally generated pixel art platformer *Starbound* (2016) and now publish similar titles; vintage publisher Team17, who famously created the long running *Worms* (1995-2016) franchise; Double Fine, the indie studio of former veteran Tim Schafer; and even edgy cartoon producer Adult Swim, all entering the fray. Even one of my interviewees, Dave Gilbert, had turned Wadjeteye into a publisher/developer upon the success of his first few games, in order to help bring similar projects to market,[139] and speaks of his role as a producer being very "hands on" because he is so "conscientious of what I sell" since it reflects on Wadjeteye as a "brand" [DG36]. An example of the coherence such vision gives to a studio is that, despite the pixelart supernatural point and click adventure game being a somewhat niche genre, Gilbert has published many such titles by other studios that narratively and aesthetically seem very close to his own celebrated Blackwell Series because they "all kind of fall into the same category of 'Dave likes this.'" [DG38]. Similarly the product portfolio by Adult Swim is, predominant and perhaps predictably, edgy satirical works, whilst Devolver Digital specialises in violent or fast paced pixel-art action games. These industrious indies-cum-indie-publishers have been joined by bigger players like The Square-Enix Collective (2019), an offshoot of the huge international publishing house based in Japan, which describes itself as a "service provider for indie developers, either through helping to build community, or with support for releasing games", leveraging its own high profile reputation and using popular crowdfunding methods (Planells, 2017) to raise funds and create audience awareness (a core part of the function of a traditional publisher, though crucially minus the allocation of huge budgets, which makes the arrangement far more profitable).

The growing complexity resulting from the slippage between commercially oriented and independently operated (indeed Dave Gilbert considers what he does "commercial" in comparison

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[139] Indeed, the spirit of collaboration in the indie studio extends to mutual support, for instance Jonathan Blow has utilised some of the cultural and financial capital from his success in the field to setting up angel investor company the 'indie fund'.

to previous "free ware stuff" he'd released prior [DG1]) has lead some scholars (Grabarczyk and Garda, 2016) to declare a distinct qualitative break with former notions of the historical amateur indie. Indeed, Nadav Lipkin argues that the current discourse of 'indie gaming' describes a distinct contemporary historical movement, tied to material socio-economic structures, that is distinguishable from more historically broad use of the term as an abbreviation of 'independent' (2013). Following Lipkin's lead, by the term 'indie' I refer to the specific current movement, what Raymond Williams might identify as a distinct cultural form. Although existing in protean form before-hand, the way I use indie here aligns more closely to the popular conception as the movement began to consolidate around new digital platforms like Steam (founded 2003), GOG (originally 'Good Old Games' founded 2008), Humble Bundle (founded 2010), and Itch.io (founded 2013), as well as other 'cultural intermediaries' (Bourdieu, 2010) like Xbox's Summer of Arcade promotion (which ran from 2008-2013), The Independent Game Festival (founded in 1998) and the hugely popular Indie Megabooth (founded 2013). The latter has been analysed by Parker et al. and described as:

> a crucial broker, gatekeeper and orchestrator of not only perceptions of and markets for indie games but also the socio-material possibility of indie game making itself… The Megabooth mediates between a diverse set of actors and stakeholders with multiple (often conflicting) needs and goals and in doing so helps constitute the field of production, distribution, reception and consumption for indie games. (Parker et al., 2018, p. 1953)

Indeed, a similar claim can be made of the other entities listed above, which all contributed to the construction of the indie sector as coherent entity in the eyes of wider games culture. As the dates of such entities attest, the modern indie game as a distinct discursive movement is a phenomena of the first two decades of the current century, gaining momentum within the discourses of key emerging sites of online games journalism – especially Eurogamer (founded 1999), Kotaku (founded

2004), and Polygon (founded 2012) – that proliferated on the internet at the same time and began

to consolidate taste cultures around these innovative new titles. The movement intensified around

the end of the first decade of the twenty first century, where several prominent titles began to sell

multiple millions of copies: *Castle Crashers* (2008), *Braid* (2008), *Limbo* (2010) *Super Meat Boy*

(2010), *Bastion* (2011), and *Minecraft* (2011).[140] Such unprecedented commercial success,

outstripping all but the biggest AAA games, in contrast to the level of investment, thus marked a

qualitative break with former homebrew indie scenes and all but insured the ambiguous relation to

the commercial industry described above. The term 'indie', therefore, properly describes an

historically bounded discursive consolidation of the sector into a recognisable and widely discussed

phenomena emerging in opposition to, but also emerging from and tied up with, established,

commercial regimes of production and distribution.

An early breakout hit of this newly coalesced indie assemblage was the game *Braid* (2008) by

Jonathan Blow, which is viewed by many as something of a starting point for modern indie (Juul,

2014; Parker, 2013), and debuted Microsoft's 'Summer of Arcade', an initiative that launched and

promoted a large number of high profile titles that collectively came to be known as 'indie' over the

Xbox 360's lifecycle and constituted the first usage of the term in its current formation. The

importance of the Microsoft platform (then enjoying the spotlight as the most powerful player in the

console ecosystem) within the rise of indie clearly illustrates the fact that the commercial industry

has always been an inextricable aspect of the production, dissemination and even formation of

indie, making any attempt to completely separate it out from that larger context as misleading and

ultimately untenable. This does not mean to say that the notion of indie is unimportant or should

share all the same motivations and desires of AAA development (although there is undoubtedly

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[140] Minecraft, developed by Markus "Notch" Persson and released in 2011, is the undisputed success story of the sector, selling 200 million copies to date (massively outselling the second place Grand Theft Auto V at 135 million copies) and purchased by Microsoft for a cool $2.5 billion.

much cross-over). As Ruffino attests, the very fact that indie exists as a discourse is indicative of an important cultural debate that cuts to the heart of contemporary videogames:

> The growing attention to [the indie] phenomenon, by critics and practitioners of the game industry, suggests that there is something at stake in the emergence of a narrative of independence in video game culture. (Ruffino, 2013, p. 107)

Like in other fields this involvement in the indie sector by large players particularly platform holders like Sony or Microsoft, has been read as a commercially appropriative process. As the indie movement becomes popular, so the argument goes, it coalesces into a series of stylistic tropes that can in turn be appropriated or co-opted by mainstream studios, either through buy outs (Microsoft buys Minecraft from indie darling Mojang, for instance) or imitation. As Lipkin argues:

> The danger of the emergence of an indie style is not the style itself; rather, it is only with the emergence of a style to co-opt that mainstream industry can intrude and create the semantic confusion that undermines the politics of production and distribution from outside (Lipkin, 2013, p. 15)

This begs the question: is there a coherent, encompassing indie style? Once again Jesper Juul has attempted to provide a master definition. For Juul the distinguishing factor of the contemporary indie style is its craft aesthetic harkening back to older visual styles within the framework of more advanced technology; where the game appears retro but could not have been actually made in the period emulated due to technological limitations. He defines this as an 'independent style', which he derives through an analysis of winners of the 'Independent Game Awards' and defines as:

a representation of a representation. It uses contemporary technology to emulate low-tech and usually "cheap" graphical materials and visual styles, signalling that a game with this style is more immediate, authentic and honest than are big-budget titles with high-end 3-dimensional graphics. (Juul, 2014, p. 3)

For Juul this ties into Bolter and Grusin's (2000) theory of Remediation, which I have explored in detail elsewhere (Bowman, 2019a). This describes a process in which a new media can be seen to create greater immersion by comparing itself against or incorporating older media forms. The authors break this process into two seemingly contradictory but mutually dependent aspects which they refer to as "the double logic of remediation": the first of these is 'immediacy', which is the desire to erase the medium entirely, and which fits neatly with video game's much lauded promise of immersion, where the awareness that the player is playing a game recedes and they instead feel a sense of unmediated presence (Calleja, 2011; Murray, 1997, p. 98). Salen and Zimmerman have famously criticised this tendency towards immersion as a striving towards transparency of the interface (the idea is that when we are immersed we forget the controller and even our bodies), which they view as the modus operandi of commercial videogames, calling it 'the immersive fallacy' (2003, pp. 450–451) and link it to the teleological nature of the game industry observed by Ruffino (2018a, p. 14) and James Newman (2012) and its obsession with technological progress and propensity for realism. The second form is 'hypermediacy', the meaning Juul is drawing on in his analysis, which is the overt multiplication and deliberate reflexive foregrounding of acts of mediation (Bolter and Grusin, 2000, pp. 5–6). Thus, we see the emergence of a structuring discourse in Juul's analysis that makes universal claims to understanding the indie sector as intrinsically self-reflexive and experimental (hypermediated) in opposition to the AAA sector as transparent and conventional (remediation as immediacy).

Whilst Juul's general point of a high-tech emulation of low-tech style is well-made and generally

describes a large degree of indie releases (especially early entries), any attempt to reduce this field

further to an essentialised, universalised, generic aesthetic breaks down in the face of the broad

range of styles actually deployed in practice. Juul falls into this trap himself when discussing the

centrality of what he identifies as a 2D pixel-style: "where each pixel has been edited by hand, and

where these pixels are enlarged, giving the appearance of a lower resolution than what is afforded

by the platform the game is running on" (Juul, 2014, p. 2). However, out of the 2005-2009 winners of

the IGF awards that make up Juul's corpus, none employ obvious foregrounding of the pixel at all in

the terms stated by Juul. Rather they employ a wide range of retro, mixed-media or hand-drawn

aesthetics that fit Juul's wider definition of an indie style as a hypermediation of past craft forms

and/or media, but not the *specific* claim that the indie style may be reduced to a pixel art aesthetic

(although that aesthetic was undeniably popular for many years).

Such an indie aesthetic as speculated by Juul has long been an assumed or expected part of

identifying or signalling indie status by fans and commentators, something that is summed up by the

fairly reductive statement: "Indies are puzzle platformers, chiptunes and chunky pixels, simple game

mechanics with complex outcomes. Shooters are not indie" (Kogel, 2012). But whilst it was, even a

few years ago, still correct to observe that indie denoted a mode of production and a particular

"rough" and "artistic" style (Whitson, 2013, p. 125), indie titles, like *The Vanishing of Ethan Carter*

(The Astronauts, 2014) and *Gone Home* (Fullbright, 2014), are becoming increasingly polished and

problematise such binary oppositions. The increasing diversification of the indie style – its essential

irreducibility to a coherent, singular image – provides a potential safeguard against the threat of

appropriation noted by Lipkin, but it also illustrates how the indie sector cannot be so simply

opposed to the AAA sector even on aesthetic grounds. As indie and AAA move closer together,

rather than see the vulnerable innovation of the anti-authoritarian 'indie spirit' under threat of

appropriation or erasure by the dominant parts of the network. The forms emerging at the

interstices of two shifting parts of an industry in flux, are already increasingly hybridised (both in terms of AAA games gesturing towards indie and vice versa). Meanwhile, the diversity of styles and approaches observable in the indie sector, even at the time Juul was attempting to pin the form down, is one clear example of a thickening of its networks, which makes them resistant to appropriation.

Here is a good point to return to Williams, whose theory is specifically designed to address the complex ways dominant frameworks interact with such emergent forms. According to William a dominant structure must always be renewed through engagement with emergent elements on its periphery, and the relationship between indie and AAA might best be understood in these terms. As Paul Jones observes: "The key hegemonic mechanism for Williams is the incorporation of practices and forms that emerge outside the control of the dominant and on which the dominant is dependent for renewal" (2003, p. 74). But rather than an obviously antagonistic relation, in which the dominant seeks to completely eradicate the threat of the emergent, these categories exist in a complex, sometimes parasitic and sometimes symbiotic relationships. Emergent threats are either incorporated or rejected in part or in whole, but this process of incorporation is always partial, uneven and gradual, with the dominant regime neglecting or focusing its resources on different elements at any given moment. Furthermore, it depends on the relative strength of the dominant.

Although models like Dymek's industry spiral give a strong sense of the consolidation and perpetuation of a rigidly controlled industry, Keogh's reassessment of the industry as undergoing disruptive new processes of informalisation, following the aggressive formalisation of the preceding two decades. The indie scene can thus be thought of as emergent in two senses. Firstly, it fits Williams definition of a radical new formation of ideas and practices outside of (but in relation with) the dominant, but it is also emergent in the game design sense of the word – that is, it is a largely unintended consequence of the system as it runs. Indeed, this is much like Shira Chess' notion of

player two, the newly emergent female audience that the games industry has largely imagined and manufactured to diversify its products. Although she considers this audience an emergent and unexpected 'by product' of general activities of the capitalist industry (Chess, 2017, p. 5), a tangible result of this discursive structure created by the industry and its marketers has led to material changes to the industry, that has resulted in a growing number of female gamers entering it both as audience and creators:

> She is a ghost, a shadow… this theoretical woman player is trapped within the stereotypes of expectation. But she is also powerful. She illustrates the influence the consumer can have to reform and change a system that was not initially intended for her. (Chess, 2017, p. 6)

So for Chess, even though the industry's idea of what a typical woman is or what she might want from games is deeply reductive, the women who are entering the sphere of gaming because of this discourse are imposing change through their very presence; a tangible example of how discourses powerfully enact change by helping to bring into being the things they describe. Similarly, the reality of indie has been created in part by the very trade stories discussed in the previous chapter, in which the promise of creativity and freedom made by the industry, but not delivered, caused those developers to seek it out (and in many case to make it from scratch) themselves. Steve Gaynor, who himself left the AAA developer Irrational Games to found The Fullbright Company (now just Fullbright), reflected on the increased movement of developers to indie game development concluding that it was partly due to a increasing lack of middle ground between massive commercial projects and independent leading "people that used to work in AAA or used to work in these studios that had fallen out of the middle of the industry… being able to strike out on our own" [SG28]. In 2011, for instance, Daniel Fedor posted the findings of a large informal survey on the key site of industry discourse *Gamasutra* conducted to ascertain the motivations and appeal to transitioning from the AAA industry to the indie sector. His key finding correlates with the sense of freedom,

wellbeing, personal satisfaction and opportunity creatives perceive to be available in the indie

sector:

> Not surprisingly, the most popular reason for going indie was "creative freedom." 73% of all
>
> respondents cited that as a reason. "Sharing one's ideas with the world" is in second, with
>
> 58%, and "improved working hours" was 49%. (Fedor, 2011)

This may on initial inspection lend credence to liberal democratic theories of cultural labour as

potentially a space for radical and emancipatory activity, explored in the previous chapter, that

Banks characterises as "a potentially radical enterprise given expanded opportunities for aesthetic

critique, (sub)political organizing and the re-moralization of economic practices in the prevailing

contexts of 'institutional individualization' and 'reflexive modernity'" (2007, p. 5). However, if we

take seriously the depictions of the conditions of the indie developers followed in *Indie Game: The

Movie* (Swirsky and Pajot, 2012), then the level of exploitation and the culture of crunch may well be

the same, the only difference in its being self-regulated in alignment with Foucauldian notions of

governmentality and self-surveillance. Indeed, as Ruffino has suggested, despite the rhetoric of

freedom indie practices tend to be "strikingly similar" (2013, p. 114).

This survey gives some credence to the perception that developers, particularly those working in

AAA part of the industry which accounted for 64% of respondents, associate indie with freedom of

expression and the ability to convey ideas more directly with an audience. But connected to this

desire for creative expression is a strong perception that working conditions are better in the indie

sphere. Indeed, Fedor's own words "not surprisingly" tellingly indicate an already longstanding set of

assumptions held by the development community that the results of the survey reinforce. This

migration has been characterised as a mass exodus in the specialist press and wrapped up in hugely

positive rhetoric of freedom and emancipation (Ruffino, 2013, p. 111). This is an association that

comes from the kind of trade stories that circulate from successful indies like Steve Gaynor (again) who, for instance, tells me that the reason he was able to pursue a LGBT love story, "a subject matter that, you know, hadn't been touched on in a mainstream game", was precisely because, "we were writing our own checks basically. We were an independent studio and we didn't have to get permission from anybody to do that" [SG17]. Side-stepping normative industry trends (as well as stories from a normative sexual identity) depended on side-stepping industry structures entirely, and the notion of 'sticking it to the man' gains a double meaning. Indeed, evoking the cassettes from feminist punk band Riot Grrrl that litter the 80s setting of Gone Home and its soundtrack, there's a certain punk anti-authoritarian spirit to Gaynor's free-wheeling sense of how they justified the game to themselves in lieu of a paternalistic publisher to shut them down: "it was just sort of like, 'here's this thing that we're making, it's weird. We think people will like it because we think it will be good. I don't know' [laughs]. You can't really get a budget spreadsheet approved based on that" [SG17]. Such a looseness is, perhaps, slightly disingenuous given the amount of skill and experience Gaynor undoubtedly carried over from his AAA training at Irrational (amongst other things giving him an insider insight into audiences and industry trends that would be less available to those developers just starting out), and perhaps doesn't quite sit with the more cautious claims about budget constraining creativity made by Vanaman in the earlier chapter. It speaks to a kind of myth-making that downplays real talent or hard-work and recalls the auteurist trade stories of success explored in the previous chapter that provide a tempting bread-crumb trail for fellow frustrated developers to follow to where the virtual grass is greener.

This movement, and attitudes surrounding it and enabling it, aptly demonstrate that the independence of indie is always relational (Grabarczyk and Garda, 2016), and furthermore such relationships are not static or absolute. In a grand sense, of course, indie is relational in that its definition as independent means that it is independent from something, so that defining indie simultaneously helps to define AAA, but in a stricter Actor-Network sense it is relational in that it

depends on those relations to exist. As Nick Lee and Paul Stenner aptly summarise in an essay on ANT, "The being of an actant is contingent upon its capacity to act, and its capacity to act is dependent upon its relations to other actants. The centredness of agentic responsibility is distributed into a dispersed network of interdependencies and co-responsibilities" (Lee and Stenner, 1999, p. 93). For Bruno Latour this relationality is a key characteristic of group formation, explored in the introduction in the ludology/narratology debate, which is under constant process of making and remaking.

Although we might be able to say that the indie sphere exists on the margins of the larger capitalist industry, even here there are complex relations of dependency with AAA studios. For instance, there is a growing recognition that the indie scene acts as a kind of R&D department for the industry as a whole where new ideas can be trialled without risk to established companies. The most recognisable form this takes is in the process by which larger corporate entities buy up and extract value from smaller ventures after they achieve a level of success, a process that has only intensified along with the pervasive start-up culture of the tech world. Casey O'Donnell sums this process up:

> When a startup is able to prove itself capable of producing value, it is acquired, so a large, established company can milk the value out of the risk taking resources... those who tire of this cycle of risk being relegated to small development studios while reward comes to large corporations often perpetuate the loop themselves by leaving and starting new companies, taking risks, and again pushing the industry in new directions. Again the cost associated with trying something new is born by those least able to. (O`Donnell, 2014, p. 154)

In another instance of industry theorising according with scholarly insight, demonstrating the depth of critical reflexivity at play in the industry, such a productive conception of the relations between

AAA and indie was well grounded in my own research corpus. Emily short perhaps says it most succinctly:

> My feeling about AAA is that they, because of their risk aversion which is inevitable when you've got that kind of money on the line, they basically are never going to do some of these things until they've seen them proved out, basically had a full roadmap of, 'here is how you do this, precisely how you do it and how you sell it,' presented to them on the indie side. You know I think a lot of AAA benefits from research work essentially done for them for free by the indie space. [ES36]

Lucus Pope concurs saying "the experimentation you see in the indie games, or the games that don't have a lot riding on them, but that percolates up to the AAA guys." Indeed, Pope shows that he is aware this influence is enacted through both material (the movement of people) and immaterial (the movement of ideas) forms of mediation: "you know people from Indie go to AAA, or they see that they enjoy these games they were playing at home and they want to incorporate elements of that into their AAA title" [LP29]. Pope and Short are both solo developers, and so it might be said they feel this way because they have a greater (perhaps exaggerated) view of the importance of indie and its intellectual capital, so it is highly relevant to see such thoughts in operation within AAA contexts of industry theorising. Speaking of a similar phenomenon, but specifically in relation not new narrative concepts, Dion Lay tells me "I think it's like a snowball effect, you just need a few games with good stories and people respond to it positively, more people do it, then suddenly everyone's trying to do a great story" [DL56.1]. Indeed, because they are curious and always thinking about design, AAA developers keep a close eye on what is happening in the rest of the industry, especially the indie scene. Although she is reluctant to claim a direct influence, Catherine Woolley suggests a subconscious influence from indie horror game *Amnesia: The Dark Descent* (Frictional

Games, 2010), which like *Alien: Isolation* shares the highly unconventional use of a undefeatable monster that stalks you through the environment:

> So Amnesia came out while we were making the game. I wasn't on the game back then... but I know a few people who were working on it before that and yes of course everyone would have played Amnesia when it came out. Of course anything can be a big influence, so I don't think they had Amnesia on their minds when they were making Alien, but of course they can play it and be: "this game does this really well, that's cool". [CW55]

Just as key parts of development are beginning to be outsourced to Asia within globalised networks of modern capitalism in order to achieve efficiencies in production amidst rising budgets, the risk bound up in innovation, which AAA developers are increasingly reluctant to bear, is (informally) outsourced to the indie sector. Those ideas can then be harvested by the core industry either directly, through the process O'Donnell describes above, or via ideas and personnel flowing back into the AAA sector. Although it may seem that way from the discourse, the flow between AAA and indie is not one way, and developers are highly likely to travel back to the relative stability of the AAA industry for a variety of reasons as observed by Simon Parkin (2017), also on Gamasutra a few years after Fedor's survey. Indeed, Parkin stresses that the flow back to AAA is increasing, which suggests we may be seeing a consolidation of the ideas and processes developed in the indie boom of the last few years into the core parts of the industry and with it perhaps a new tendency toward (re)formalisation. The movement of talent back to AAA and the new spate of platform holders and publishers buying up successful indie studios, though perhaps disheartening in some respects, also ensures a flow of new ideas and those with the vision and skill sets to implement them. Reflecting again on his time on Microsoft's stage following the success of *Gone Home*, Gaynor tells me: "It's that ebb and flow of the new upstarts becoming part of the establishment and then the market changing and new upstarts having a new avenue into putting their stuff in front of an audience and

that's really cool" [SG30], demonstrating positivity, that I can't help but share, that rather than being

simply appropriated into the system by lascivious mainstream forces a more nuanced accounting is

taking place in which both indie and commercial markets are changed in the encounter. Rather than

a threat to gaming, as the discourse of the indiepocalypse suggests, the indie scene is (like Chess's

player two) the commercial industry's shadow and its likely source of rejuvenation.

'BREAKING OUT NARRATIVES': REASSEMBLING INDIE AS A RELATIONAL CATEGORY

As explored above, today's indie sector is fuelled by an influx of new talent unable (or unwilling) to

break into the AAA sector (Keogh, 2019b) as well as established developers breaking off from AAA to

pursue their own creative goals (Fedor, 2011; Whitson, 2013), but the development of these

disparate individuals into a coherent sector was aided by the development of several high profile

digital distribution platforms that took advantage of a newly ubiquitous broadband infrastructure

(Ruffino, 2013). Most important to this transition is the consolidation of the PC gaming ecosystem,

which has been transformed from a niche, scrappy and highly fragmented activity (like indie or art

games themselves) to a significant challenge to mainstream console gaming, mainly as a result of

Valve's innovative digital platform Steam. Steam essentially builds a console-like ecosystem on top

of the formerly fragmented PC user-base, making it easier for players to buy, run and play games,

whilst providing commercial studios the guarantee of a robust Digital Rights Management (DRM)

system that undercuts the threat of piracy that had historically prevented many large studios from

releasing on PC.[141]

Such digital distribution platforms allowed creators to avoid the huge expense of manufacturing,

distributing and marketing boxed products, as well as the large cuts high-street retailers took from

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[141] The bespoke and heavily patented hardware of consoles have historically meant they are much harder to
pirate at least since Nintendo's innovative lock and key system built into its cartridges.

sales. Along with this the release of the free game engine *Unity* (Unity Technologies, 2005)

considerably broadened access to the tools required to make games, and proved so effective that it

quickly forced established engines like Epic's *Unreal Engine* from an upfront payment model to a

free to use model with royalties based on a certain threshold of sales. Indeed Gaynor expresses such

"accessible" technology and tools such as Unity as a key motivating factor of the growth of indie

development [SG28], a sentiment that is echoed by Lucas Pope, who links together digital market

places and accessible tools to make a claim for there being a direct route to market that simply

didn't exist at the turn of the century:

> But now with Steam and GOG and you know all this online distribution stuff, anybody can
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> make a game and importantly anybody can sell it and then you can always find an audience,
>
> almost, for what you're selling if you play it right. So that has basically just broken open the
>
> gates for what you can do in games successfully. And so I think that's a huge change in a lot
>
> of ways just makes it easier. Unity makes it really easy to make games now, there's a lot
>
> more technologies to do that sort of thing. [LP28]

These changes in access to markets and production tools, has not only been a boon to developers

looking to strike out on their own but has fundamentally reassembled the audience(s) for games,

fragmenting them in a manner similar to the TV audiences of the post-network era (Clarke, 2012;

Lotz, 2014) but also expanding their reach and creating something akin to a goldrush mentality in an

already healthily expanding sector. The migratory nature of videogame employment we observed in

the previous chapter, fuelled by precarious short-term contracts and project based work that gives a

churn and cyclicality to gamework (Kerr, 2010), as well as the high rates of burnout in large studios,

has arguably contributed to this movement further, effectively giving a desirable place to flow for an

occupational community already highly fluid and nomadic. Increasingly aware of their prospects in

the AAA grind (Beaudoin, 2016), and spurred by the proliferation of trade stories around high profile

successes has made the indie scene appear as an attractive alternative to developers who feel trapped in repetitive and thankless work at commercial studios.

The pernicious conditions of AAA that are often seen as a spur for developers to move to indie have been a perennial concern on industry blog Gamasutra at least since they republished and gave considerable exposure to the blog written by 'EA Spouse' in 2004 (Carless, 2004). This post, much covered by academics, became an important flashpoint for debates around working conditions and crunch (O`Donnell, 2014, p. 159). Significantly such critiques of AAA practices have often occurred on the same site as key documents (like Fedor's survey) that establish indie as a site of creative freedom, which should not surprise us since Gamasutra is mostly written by the very developers who desire more creative freedom in the first instance.

The previous chapter highlighted Catherine Woolley's move from Creative Assembly to The Chinese Room as the precarious and migrant quality of the industry, but it is also indicative of this trend of AAA developers seeking work in smaller indie studios in order to more fully realise her creative ambitions. She frames the physical move she makes to improve her career with the larger aesthetic move she perceives the industry making towards more complex and mature narrative: "But with me moving to the Chinese Room I'm like, 'yeah I care about narrative.' I want to be deeply involved in storytelling. And it's the right move that games are taking, especially with games taking in subject maters that weren't in games before and telling different stories and having females as main characters" [CW59]. Here Woolley conflates her move from AAA to indie not only as one from more constrained forms of AAA development to more free forms of indie development but identifies indie as a greater source of narrative innovation, and in particular a place where normative modes of gaming (and the normative male protagonists of the hegemony of play and the industry spiral) can be countered. This is characteristic of a prevailing school of thought that the vanguard of narrative

innovation is seen to be more likely found in smaller studios. Although, having said this, its important not to discount innovation in the AAA space entirely, especially in light of my claim that AAA and indie cannot be so easily contained in the traditional dualism of imitator/innovator. Pinchbeck, for one, pointed out a belief that improvements in diversity of both stores and characters derive as much from risk-taking in the key genres of AAA development in studios like Naughty Dog, whose work for Sony has increasingly taken on the qualities of a kind of prestige project, but even in studios like Ubisoft that are elsewhere lambasted for their conservatism:

> I think it's becoming better, slowly. I think people like **Naughty Dog** are as responsible for that more than anything else… I think it is baby steps. I think the idea of that very kind of fuzzy storytelling is still scary as hell to big name developers, because there's so much riding on it… It's amazing that you have people like AJ, who's a non-white character in **Far Cry 4**, you do you have more females… so that kind of stuff, that's where it's changing slowly, not fast enough but it is changing in terms of the types of stories that are told. [DP66]

What we see above, in claims such as Woolley's, is evidence of an already established and extensive set of discourses circulating to form what Indie as a practice is, and as Michel Foucault (2002) argues such discourses help to create the realities they describe. Where this idea came from and whether it is true is beside the point, what is important is the fact that it is seen to be true enough to be a motivation for many individuals to take material action, what Angela McRobbie calls a 'line of flight' "the idea of flight or exodus as a practice of struggle", which despite reservations as to the actual truth of claims of freedom in the indie scene, never-the-less presents a kind of **"**hairline politics" that open up "possibilities for movement on the part of young women as something more than individualization process and entrepreneurship of the self" (2016, p. 95). Furthermore, by taking such action, by becoming actors in a new network they form through their endeavours, these developers (male or female, in respect to my study) help to create the reality that the survey

projects by building the very studios that allow them to be more expressive – thus bringing the conditions for greater freedoms about through material action. As Bruno Latour submits in his study of Pasteur's discovery of microbes in nineteenth century France, the fact that a huge range of discourses around moral or social regeneration and public health pre-existed Pasteur's work allowed his research to be taken up very quickly as a matter of national urgency (Latour, 1993a). In short, Pasteur drew on the existence of the hygienist movement as a reservoir of ideas and practices, and was able to align their interests to his own, in much the same way that the idea of the emerging indie scene is enough to convince individual developers to act by aligning their own trajectories to it, bringing it into being as a kind of *fait accompli*. In short, the fact that the microbes that caused germs could not yet be seen (until the research of Pasteur commenced), their effect was enough to make the hygienists believe in them and in Pasteur. Likewise, discourses circulating around the Indie sector, and the equally invisible indie spirit that is often speculated to underpin it (Jahn-Sudmann, 2008), continues to have a material effect on the production of the indie scene despite being an abstract ideal.

One of the key ways developers have typically entered the games industry (one obsessed with the notion of a shipped product as a sign of applicant ability) is through the creation of a game independently as a kind of calling-card or portfolio, either within the context of a final year project of the growing number of vocational art school courses or via their own initiative via auto-didactic methods, like the developers of *Super Meat Boy* (Team Meat, 2010) explored in the documentary *Indie Game: The Movie* (Swirsky and Pajot, 2012). Increasingly, though, the indie sector has been bolstered by individual developers, often with some reputation, leaving larger studios and replicating their institutional knowledge on a smaller scale (Fedor, 2011). This latter group, which I am most interested in here since in their movements they demonstrate and embody the material links between the AAA and indie sectors, is consistent with Latour's notion of how groups come to be formed via a gathering of a number of different trajectories, which represent "a kind of balance

sheet which presents individual careers in terms of the credit (cultural capital, social capital, operations) with which they started and the positions in which they invested" (Latour and Woolgar, 1986, p. 214).

Greg Kasavin raises an interesting, highly reflexive point that these trajectories and relationships between indie and AAA might be profitably thought of as stories which developers tell about themselves; stories that have and express values, but can also be read, verified and used by others:

> The story of how we made *Bastion* was important to us, and I think the stories of how independent games get made are often interesting… In our case it started with two guys who quit their jobs at EA, moved into a house, and started making a game. The team grew to seven and the resulting game was *Bastion*. It was a personal project for us and we wanted people to know that, because the context in which games are made can explain a lot about them, and why they're made. (Kasavin quoted in Dutton, 2012)

O'Donnell talks about breaking in narratives, in which indie designers discuss how they taught themselves to make games and develop the skills the industry needed through striking out and making an indie game to use as a calling card. This suggests that the budding game industry workers must show their mettle, initiative and entrepreneurial spirit to the industry by paradoxically being told "that one has to make games in order to learn to make games" (2014, p. 140) although such "students are expected to 'make games' without any knowledge of how they are produced in the actual game industry" (Ibid., p. 142). The breaking in story thus preserves and perpetuates the industry's glamorous mystique and its culture of secrecy, operating in much the same manner as the magic circle, the legendary club for magicians with its rather arcane and masonic application process ("The process for joining The Magic Circle," 2019). In their consideration in the complex ways consumers and producer identities can overlap in the games industry, Dovey and Kennedy use the

term 'independent developers' to describe "those elements of player communities who share the aim of breaking into the industry to produce commercially successful games or gameplay software" (2006, p. 127). At the time Dovey and Kennedy were writing the only challenges to the hegemonic AAA model were coming from the fringe fan communities or radical visual arts communities. For these scholars the indie scene is often seen as a mere dress rehearsal for the real work of getting into the industry proper, but as I have shown here, and as Kasavin alludes to above, the indie scene in its contemporary sense is now a destination in its own right rather than a means to an end, and indeed it has reached the critical mass to be self-sustaining despite increasing doom laden rhetoric that we might be on the verge of an indiepocalypse because of too many indie games (Clark, 2015; Coster, 2015; Galyonkin, 2015).

In contrast here I want to develop the notion of a 'breaking out narrative' that accompanies the exodus from industry to indie. In this context, rather than a calling card addressed to the industry in hopes of employment, such games can be seen as a kind of farewell note. By embodying some of the ideas that remained unexpressed in their former career, the new game implicitly (and often explicitly) reveals the reasons why the developer decided to leave AAA development, and critiques it in the process. In some ways *Bastion* (Supergiant Games, 2011), the first game made by Kasavin and their team following their exodus from the industry, is the ideal model since it is clearly concerned with the function of creativity and world building as they come to terms with their new existence on the periphery. Just as the 'Kid' of the story makes the world appear around him as he walks, Kasavin imagines his origin story beginning in the same kind of house that starts the story (we will see the continued import of such domestic spaces to the indie self-conception in our analysis of the role the home-studio plays in the emergence of the walking simulator genre in chapter 4). It is a story about a boy trying to find his way after the 'calamity,' a traumatic rupture with the past that has set him adrift in an unstable world ripe with possibilities, a world that seems to yield to his touch, but that is also full of dangers – thus expressing the opportunities and challenges of indie development. Rather

than neglect the production context of games and the intentionality of their creators, as has so often been the case in game studies, we need to realise that they are bound up with, indeed they are inseparable from, the products they create, and this discussion will aid that process.

This conception of the breaking out narrative requires, indeed is dependent upon, a reconceptualization of the studio as a site of experimentation, where the works produced are informed by the material structures of their arrangement that facilitate a particular flow of creative forces and narrative ideas. To do this I draw on the emerging field of studio studies, which seeks to do for the key site of cultural production what ANT within the field of science and technology studies did for the laboratory; to open it up as a black box and explore the interrelated social and technological processes at play within their walls. For the editors of a collection of essays on this new sub-field, the studio has long been a problematic and poorly defined concept in studies of the cultural industries: "the studio remains a peculiar and remarkable lacuna in our understanding of how cultural artefacts are brought into the world and how creativity operates as a… situated and distributed process" (Farías and Wilkie, 2015, p. 1). Drawing on Isabelle Stengers' (2010) notion of cosmopolitics the editors insist studios are of vital importance to analysis because within them are generated "events at which the possibility of new social and cultural arrangements, and the kinds of common worlds that studios are part of speculating on and constructing, are at stake" (Farías and Wilkie, 2015, p. 5). Furthermore, studios like labs can be the site of a form of experimentation where "artists are increasingly conceiving and configuring their studios as experimental systems akin to laboratories" (Farías and Wilkie, 2015, p. 8). This is born out in a significant way by one of my interviewees, who insisted that the best development studios emulated academic research in the sense that the developers had a research question that they were seeking to answer or explore in the process of producing the game [DP57].

For Pinchbeck this kind of experimentation is constructed along the lines of industry theorising

proposed by Caldwell, and further it is something he suggests is only possible in small studios where

creators have more control over their product, even though they are still ultimately working in a

commercial context [DP57]. This begs the question is there an overlap between the notion of the

studio as it is typically deployed in the visual arts, as a space where the artist is cloistered and

prepares to make an intervention into the world (Buren, 2010), and the commercial game studio of

the designer? In Raymond Williams famous exploration of changes to the notion of creativity

through history, he has clearly identified the increasing involvement of a commercial imperative

within the structural relations by which artists sit within the wider cultural context, beginning with a

system of patronage and ending with the 'corporate professional' which Jones summarises as "a

modern corporation with strong tendency to reduce the role of artist to salaried professional but still

compatible with market professional relationship" (Jones, 2003, p. 149). In short artists have never

been economically independent, any less than game designers, and regardless of whether game

designers possess same level of creativity as artists, the almost universal choice of the term studio

(rather than workshop or company) implies a gesturing towards such artistic pretentions by

designers (as greatly evidenced in Pinchbeck's assertion that all game design is a form of research).

Further, for the editors of the book, "the dissemination of the studio as a workplace model can be

seen as part of a more general trend towards what might be called, not without a critical undertone,

the 'creativization' of work practices" (Farías, 2015, p. 193), in short they are the ultimate node

within the immaterial networks of post-Fordist cognitive capitalism that seeks to fully

instrumentalise creativity. This makes Farías' concept of a process-oriented definition of a studio laid

out in chapter 2, "as a space created for and through the operation of manipulating both objects and

environmental conditions" (Farías and Wilkie, 2015, p. 201) rather than a coherent geographical

space, highly relevant to this study.

Within the highly volatile and migratory nature of videogame development, the game studio is

highly unstable. This is very much demonstrated by the case of the publisher THQ's bankruptcy,

following which its IP and studios were scattered far and wide (Lien, 2014). The THQ name itself was

purchased by the Austrian company Nordic Games, who rebranded THQ Nordic and began work

continuing the IP of the former studio such as *Darksiders III* (THQ Nordic, 2018). The fact that this

was so poorly received compared to the originals, reveals a realisation that studios are not eternal

and stable, but are rather composites of the internal processes and personnel that make them up at

a given moment. This is precisely why the journalistic apparatus traces with great interest the

trajectories of high profile figures from beloved studios like Looking Glass Games, who with *System

Shock* (1994) provided the model for the immersive sim genre (Mahardy, 2015). Thus, for my

purposes, the studio can be thought of as a more or less unique ensemble of individuals, investing

their accumulated credit; carrying with them different experiences, values and skills. Although

studios give a suggestion of pedigree through the persistence of their name and branding, and such

pedigree is one of the factors Consalvo and Paul see as reassuring to core gamers (2019, p. 27), the

studio can therefore be reconceptualised as a provisional and contingent structure, made up of a

temporary and shifting alliance of shared interests and talents. These trajectories are oriented

towards a highly uncertain and experimental process dedicated to bringing something new into

existence.

Writing on a particular style of conspiratorial narrative in contemporary transmedia television, M.J.

Clarke makes the assertion that cultural texts bear the imprint of their conditions of production, for

instance the flexible and precarious work conditions and what Manuel Castells refers to as the

'network society' (Castells, 2009). For Clarke such textual 'reflexivity', which overlaps with Caldwell's

notion of industry theorising as a form of production reflexivity, is "a way of understanding of texts

not simply as the results of a set of pre-given conditions, but as being in conversation with these

conditions" (Clarke, 2012, p. 18). I share with Kasavin and Clarke (an example of industry and

academic theorising on the topic) this belief that the conditions of production can provide an informative context for understanding the range of meanings at play in a game, particularly those games that are made immediately after breaking out. The anxieties and emotions involved in the transition between AAA and indie (and sometimes the other way around) amount to a new outlook on the world and inevitably bleed in some form into the story itself. Further for Clarke "it is the analyst's job to pull these traces forward… illustrate how these current works' more experimental stylistic elements place them into conversation with the industrial and organizational changes that serve as the programs' context" (Ibid.). It is such an operation I hope to perform here, through the application of my notion of the breaking out text to the game *République* (Camoflaj, 2013), as a means of teasing out the complex interrelations between the AAA and indie sector, and the movement of ideas and actors between the two. The game itself becomes one of Caldwell's deep texts, a mechanism that articulates and negotiates industry values, addressed principally to the industry itself.

RÉPUBLIQUE: A HOPEFUL DECENTRING OF THE PLAYER

Camouflaj is an American microstudio based in Seattle, Washington and founded in 2011 by Ryan Payton in order to create the dystopian drama *République*, which was successfully funded on Kickstarter by the slightest of margins. Having formerly acted as a producer on major franchises like *Metal Gear Solid* (Kojima Productions, 1998-2018) and *Halo* (Bungie & 343 Industries, 2001-2019), Payton's trajectory through the industry embodies the notion of the AAA to Indie exodus and the recurrent rhetoric of emancipation. Payton thus has experience working on two of the most significant AAA franchises in videogame history, both in terms of budget and fan investment, which respectively had been flagship exclusives for Sony and Microsoft's platforms. Payton recalls a moment in which it sunk in that he had a much larger degree of control in his new indie position:

in the [recording] booth on *République* was the first time where I didn't have to worry about doing something really crazy and then going back into the office and getting yelled at by anybody, you know? … I had final say on things so that was an exhilarating experience. It's kind of scary but it was nice to have the gloves off and be able to do whatever we wanted to do. [RP4]

As suggested in chapter 2, such independence can be a double edged sword, and later on Payton also acknowledged the significant material constraints of indie game development: "I think we could have done more, but ultimately it's because of lack of production resources" [RP47]. The absolute nature of creative freedom must be understood then as an unobtainable ideal; in relation to the AAA sector it operates in the modal form as 'more free' rather than free. Removal of the publisher may create more room for the free play of ideas, but the removal of financial guarantees and oversight, by contrast, increases the rigid structures of material constraints. Payton's move to indie development plays into, but also problematises, the emancipatory discourse around indie because although creative freedom was a definite motivation, so too was the frustration at having been demoted within Microsoft and "feeling very crestfallen and embarrassed… I really felt like it was time for me to stop just borrowing other people's ideas or universes and really try to see if I can create one myself" [RP23].

Payton's breaking out story plays into the drama we have come to expect from such discourses; it is one of overcoming personal demons following a knock in confidence and moving to indie dev as a means of pursuing his own original ideas. It is a tale about clutching victory from the jaws of defeat and turning his life around in the process. He speaks explicitly about the experience he took from his work in the industry helped him to appreciate "who I was as a creator and as a producer of games" [RP5]. But aside from such intangible skills, he also took some very material things with him during his transition based on a network of prior collaborations: "we borrowed a lot of voice talent who we

previously worked with, or at least I previously worked with on *Metal Gear*" [RP3]. Most notably these were David Hayter (who famously voiced Solid Snake, the hero of the majority of the *Metal Gear Solid* games) who here plays the revolutionary figure Zaiger; Kris Zimmerman-Salter, a veteran voice director with whom he had worked on *Metal Gear Solid 4*; and writer James Clint Howell, who ran a fan site dedicated to *Metal Gear Solid* and was responsible for scribing much of the background text in *République*.

In some respects the economic existence of Camouflaj also depended directly on Payton's work in AAA since much of the expensive start-up costs were paid by cashing in stock options (which in the tech industry are often granted employees as an incentive) and pension schemes: "Long story short I left Microsoft I liquidated all my stock I liquidated my 401(K) [pension fund], all my retirement, and started this company and this really started with two people, then three people and eventually just continued to grow" [RP24]. Starting up Camouflaj is not only pitched as a huge risk, gambling Payton's current and future financial security in a nation with notoriously bad social welfare provisions (making the development of indie studios in America much riskier than in Europe, where socialist welfare programmes still exist, albeit precariously), but is seen to be a direct translation of economic capital from 343 Industries and reputational, or what Bourdieu would refer to as cultural capital (Bourdieu, 2010), from Konami. A powerful literalisation of the "balance sheet which presents individual careers in terms of the credit (cultural capital, social capital, operations) with which they started and the positions in which they invested" (Latour and Woolgar, 1986, p. 214).

The composition of the new studio is, perhaps inevitably given its size, different in quality and structure than Payton's previous roles as a middle manager in a much larger corporation. Payton's model for describing this new lack of restraints is to compare it to "playing jazz every day" [RP19], not only suggesting an improvisational quality that speaks to the collaborative poetics described above, but significantly evoking a musical form steeped in ideas of radicalism, marginality and

freedom. The more mundane reality of this gesture is to gather the team around a whiteboard: "so the way that I like to work is, I like to get us all into a room. I like to put all the problems on the board and try to map out what our solutions are" [RP20]. Although this shows a desire to instantiate a more human form of collaboration focusing on the studio's sociogram in a microstudio, even here the technogram bears an important influence on these practices, and entities like the white board become vital nodes of exchange in the collaborative poetics of game development – nonhuman mediators in the same actor-network. Meanwhile, the notion of jazz evokes a freedom and improvisational spirit that whilst contrasting squarely with the stuffy, structured and restrictive realities of AAA, the manner of discussing creativity as a set of problems to be solved seems to undercut this spirit of freedom by aligning creativity to the rigidity of mathematical formulae.

Indeed, Payton's white board is a material expression of this desire to emphasise the collaborative dynamic of the creative process and in this sense it can be thought of in terms of one of the crucial elements of agile methodologies explored in chapter 2, which draws on notions of Kanban. Developed by Toyota president Taiichi Ohno and named after the coloured cards that formed a message board that traced materials through the production process in a way that is transparent to all involved,[142] kanban allowed parts to be manufactured in a 'just in time' format that significantly increased efficiency in post-Fordist regimes of flexible production (Womack et al., 2007). Whilst in the auto industry this process normally traces material components, in the immaterial domain of videogame development it more accurately traces the flow of ideas. Indeed, programmes like *Trello* (Atlassian, 2011) attempt to formally systematise the kinds of processes that unfolded on Payton's

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[142] The authors of The Machine that Changed the World initially attribute Kanban to the "containers carrying parts" so that "as each container was used up, it was sent back to the previous step, and this became the automatic signal to make more parts" (Womack et al., 2007, p. 61), they later corrected this to acknowledge that Kanban was merely the name of the messaging system that tracked the flow of parts in the Toyota factory, but in some quarters this original interpretation still defines the notion of kanban as it has been taken up in lean methodologies.

white board in digital terms, demonstrating a clear visual analogy to Toyota's original Kanban system.

Camouflaj's whiteboard is a material expression of this desire to emphasise the collaborative dynamic of the creative process and it is presented as an obligatory passage point in the studio's technosocial assemblage (Latour, 1988, p. 245), a node through which all actors must pass. But even here, in the supposed flattened hierarchy of the collaborative indie microstudio suggested by the jazz metaphor and the presence of a Kanban board, there is still a hierarchy with some actor's intentions bypassing others and playing out in non-transparent terms. Thus describes the core direction the narrative takes being a result of Payton and writer Brendan Murphy locking themselves away and "fighting and working through really complex and difficult story problems almost on a daily basis for hours and hours on end" [RP20]. This description of the day-to-day realities of the working process indicates quite clearly the evolution of game narrative as polyglottal in Russian linguist M.M Bakhtin's (1982a) terms, in which dialogue is seen to be shot through with multiple voices and meanings that compete for dominance. For instance, Payton and Murphy's ideas are fused together, but only after they 'fight' them out, and then are inflected by the input of the rest of the team.

Even when finally 'independent' from them, Microsoft and 343 Industries continued to exert an influence in constructing the new studio's identity, as a negative point of comparison; one of Latour's out groups (2005, p. 31). Specifically, Payton speaks of pursuing ideas that were denied to him in the more conservative and risk averse mainstream studio, such as taking much further the player's relationship between Halo's protagonist Master Chief (whose super soldier persona is the very epitome of the normative gamer hero) and the game's AI entity Cortana: "in my design the players actually lose the UI and… any kind of value that she adds to the game, to have a sense of separation and loss… it's just because the team decided not to move forward with that idea after I

left. But that was one of our I think our better ideas in terms of trying to do something different with game narrative" [RP9]. Camoflaj provided a space where such ideas could be returned to and explored, which demonstrates how the studio can be thought of a space of experimentation just as much as a laboratory, though the output is a commercial and cultural product rather than a scientific fact or apparatus (Latour and Woolgar, 1986). The notion of dependency is here explored via the player's complex relationship with *République*'s protagonist Hope, which rests at the very heart of the game's radical approach to the normative tendency towards placing the player at the empowered centre of the game experience. Indeed this challenges what Henry Jenkin's has famously proposed is embodied in the core principle of gameplay: the domination and "mastery" of space (Fuller and Jenkins, 1995). In many ways this subversive ambition to challenge mainstream conventions structures the studio's credibility as and claim to be indie in discourses surrounding the sector. Indeed, as Payton relates here, the very impulse behind the game was a challenge to the prevailing conventions and executive thinking around what constituted a mobile game: "Mostly what the thinking was, and still kind of exists today, is that mobile devices or mobile games and iPad games are only for the time that you're standing in line at Starbucks… And we were basically saying like… 'we want to take a risk on a more long-form narrative'" [RP32].

Here we can see how indie developers must not only cautiously distinguish themselves from the traditional AAA industry and its core gamers, but also negotiate a point of differentiation from the notion of casual games most often associated with the mobile platform, which typically consist of simple games with limited narrative and short play times (Chess, 2018). Here Payton's desire to do something different with mobile not only asserts his credentials as an indie provocateur taking on the assumptions of the industry, but problematises the easy relationship between mobile games and indie games as categories of play or as specific audiences. The challenge *République* throws down is manifold, directed at subverting expectations on the levels of narrative, genre and medium. But whilst Payton imagines the game to challenge notions of what makes a mobile game it is the

challenge to the core gamer that is more fundamental. This challenge is embedded in the slippage between the player and the avatar they normally are made to inhabit, since in *République* the player doesn't play as Hope but as themselves.

The game begins, dramatically and memorably, with a phone call. It's a trick the game will play several times, but at this point it is utterly unexpected. For the player, especially one used to the conventions of AAA storytelling, a game should behave like a game and a phone like a phone but this game rather uniquely decides to break the fourth wall by calling you directly and implicating you into the game's fiction. Or, more specifically Hope, the protagonist, decides to phone you, thus initiating the story through her first act of independent agency. This appropriation of the phone interface, which reminds the player they are playing the game on a device designed for other purposes, is another delightful piece of what Bolter and Grusin (2000) call hypermediation, as discussed above in relation to the indie aesthetic, but in foregrounding the artifice of the medium actually increases the level of investment rather than diminishing it. Hope, clearly in a fraught situation, her harrowed face appearing in extreme closeup, whispers frantically to the player that she needs your help in escaping an Orwellian cult-like academy where she has been trapped her entire life.

Before the player can gather their thoughts Hope is interrupted and in the split second before discovery the screen freezes, becoming overlaid with a filter that mimics the aesthetics of a CCTV interface (another format the game remediates), the player taps on a CCTV camera glowing orange and enters the game's surveillance network as a ghost in the machine. Now, jumping from camera to camera, the player is able to scout ahead and view the scene from a limited position of foreknowledge constrained by the movements of the cameras and then direct Hope's movements through the academy in her bid for freedom. Thus, the game literally places the player as an actor in a virtual network, but not in an embodied way and crucially not at the centre of the network, a space which is occupied instead by Hope. Hope becomes a kind of analogy for the new player type, Chess'

'player two', attempting to extract herself from the hegemonic structures of both the AAA game and the manipulative frameworks of the mobile game, but also an attempt to negotiate her own centre in both the game and game culture. In the opening sequence *République* deliberately dramatizes this split between player and protagonist, making it the engine from which its meaning derives. In a third person perspective game (where the player follows along just behind the shoulder like a steadycam operator), the player is made to identify with the player character but also controls the camera (Calleja, 2011, pp. 61–67). However, in *République*, the player is literally embedded in the camera, whilst only being able to influence Hope, who is much closer to a protagonist in a medium like TV rather than a videogame avatar. For Payton this radical split was a fraught balancing act between the player and the protagonist in that it was necessary to emphasise that "the player is not Hope and that Hope is not the player," and to show that "sense of being a smart autonomous force" whilst still "giving the player the amount of control that they expect out of a videogame" [RP28].

Reading this in light of Payton's breaking out story, it's tempting to read extra significance in Hope's name; Payton literally wants the player to put their hope in her in the same way that he himself has put his hope (as well as his savings and reputation) into the studio and this game. Meanwhile the player, typically conditioned to expect that they are at the centre of the game experience and in full control of the avatar, are asked instead to put their trust in Hope, and to be satisfied watching from the side-lines, their agency heavily curtailed by the game's indirect systems. Certainly, according to Payton this caused much alienation for some players, producing an almost Brechtian means to question the nature of immersion of the player through an encounter with the agency of the virtual other. Such a problem highlights the contradictory nature of the precarious indie developer, who desires to disrupt conventions and take risks, but exists in a state of financial need which precludes them from alienating the potential audience too extensively.

This displacement is especially fascinating when considered alongside Payton's previous work in the AAA sector on *Metal Gear Solid*. The *Metal Gear Solid* series often carries the tagline 'Stealth Espionage Action', which is both an attempt for Kojima to attempt to differentiate his game by prescriptively creating a hybrid genre for it, but also an effective indicator of the type of experiences that are built around the player. In controlling Solid Snake, players are put in the role of a genetically enhanced elite operative to play out the fantasy of a James Bond style caper with the fate of the world in the balance (espionage), meanwhile in *République* players are tasked with aiding a young girl escaping an oppressive regime. In *Metal Gear Solid* players directly control Snake to sneak around or silently pick off guards (stealth); in *République* players instead instruct Hope to sneak around and may only incapacitate guards as a last resort. In *Metal Gear Solid* players are at the centre of a high-octane experience modelled on action cinema (action), whilst in *République* the atmosphere is constructed around the vulnerability of Hope whom the player has limited control over. *République* subverts Payton's *alma mater* on all three of its genre markers. In spite of attempts to maintain relations with the conventional player, in *République* the stakes are lower, the player more vulnerable and their actions more limited (and desperate) than in its distant AAA cousin. In his breaking out story I therefore argue that Payton has cathartically enacted a deliberate undercutting of each of the three parts that make up the identity of *Metal Gear*.

It is the striking ending of *République*, however, that provides the biggest strategy of displacement. On the deck of a ship Hope is given the choice to go with the revolutionary Zaiger, or back to the academy and conformity. The choice is presented to the player as a binary set of options, as is *de rigour* for such games, and they no-doubt fully expect to make that choice as the player-custodian of Hope. But before the choice made by the player can be processed by the game's algorithm, Hope escapes the bind by making her own independent (indie?) choice by jumping off the side of the ship. The fact that people were upset about this online, as Payton claims, is hardly surprising because it flies in the face of both the understood parameters of player agency and the expectations of a tidy

ending. Contra to the claims from the *Tombraider* producer about the player's paternalistic relationship to Lara Croft as protector, Payton asserts Hope's choice: "she's now reached this point in her life where she can make decisions, you don't have to be her caretaker anymore" [RP39]. It is a moment of unexpected narrative absurdity, even more effective given that it comes at the end of a five episode 20 hour odyssey, that bravely carries through on the game's themes by making Hope finally and ultimately the agent of her own destiny – even if that destiny is (supposedly) death. And in divesting the player of agency in making the choice, Payton and his team simultaneously, subtly but forcefully, reinstall the intentionality of the designer to confront the player with a story and an outcome that is beyond their control (and their controllers).

Drawing on Donna Haraway's influential Cyborg Manifesto (Haraway, 1991), Brendan Keogh posits two opposed models of the player as hacker and cyborg:

> Where the hacker strives for autonomy and dominance over the machine – an all-knowing, god's-eye, viewing-from-above perspective – the cyborg embraces the fact that it is always already in part shaped and mediated by the machines within which it integrates: always already partial, always already mediated. Not seeing from above, like God or a configurative and transcendent hacker-gamer, but seeing from somewhere, from a situated and partial perspective, through a body that is spliced with its worlds. (Keogh, 2018a, p. 182)

République rehearses the possibility of creating this new type of cyborg player, in opposition to the core gamer whose hacker persona suggests a relation of dominance and control. The player literally hacks into the representative space of the game, but instead of being in control finds their view to only ever be partial and delimited by the camera interface, the game's indirect mechanics and ultimately Hope's own agency. The player is decentred within the surveillance network of the game and its mechanical-aesthetic regime, in the same ways that in ANT "the centredness of agentic

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responsibility is distributed into a dispersed network of interdependencies and co-responsibilities"

(Lee and Stenner, 1999, p. 93). By displacing the player to the fringes of the game's networks of

control and representation the game thus critiques the traditional impulses of spatial mastery Henry

Jenkins sees as a core aspect of gaming, becoming a highly effective version of what Soraya Murray

calls "playable representations" (2017, p. 25) in an attempt to roll together Alexander Galloway's

(2006) notion of videogames as orientated around intentional acts and the broader cultural studies

use of representation as a politics of identity (Malkowski and Russworm, 2017).

In the final part of the game's final episode the player must traverse once more through the guts of

the academy as it burns. Meanwhile, towards the end of my interview, and almost as though the

thought had come to him for the first time, Payton reflected: "You know I didn't really think about

this until now but that might actually just be like symbolic of how we were feeling about the game

after working on it for four years. We just wanted to blow it all up and watch the world burn, just

like Zeiger" [RP46]. This sentence posits the game as both a manifestation of the breaking out story

as an instance of industry theorising (an opportunity to counter tendencies encountered by the

developer in AAA using their, relative, new found freedom in the indie sector) and also as an

example of M.J. Clarke's notion of reflexivity, in which the media texts bears the allegorical traces of

both its means of production as well as a comment on the larger industry structures. In the final

analysis is there perhaps a hint of ambiguity between whether the thing that Zaiger/Payton wants to

burn down is merely a reference to the difficult and exhausting experience of being a precarious

indie game developer, or a revolutionary challenge directed to the industry at large?

Either way, we can see the tensions between AAA and indie are subconsciously dramatized in

République's plot: caught between the flawed radicalism of Zaiger (the precarious and rebellious

indie sector) and the oppressive regime of Mireille (the conservative, AAA industry), an emergent

truly cyborg model for a new type of player must radically disentangle itself from the player as

hacker. *République* provides a complex, experimental space in which to begin this process of disentanglement – but crucially there are two spaces, one the physical site of the indie studio in which Payton and his colleagues attempt to disentangle themselves from the AAA industry, and the virtual space in the game where the player is cleverly prompted enact their own attempt to follow Hope's lead and escape from the dominant expectations of the medium towards empowerment, agency and control. *République* is truly evidence of an innovative tendency in the indie scene to radically explore new possibilities for play and storytelling, prompting the player to stop and critically reflect on long taken-for-granted assumptions, but crucially this challenge to the norms of the medium would be meaningless if read apart from the processes of AAA development in which the game is bound up in relational networks of dependence and a constant dialogue that manifests in my concept of the breaking out narrative.

CONCLUSION

Mark Banks has argued that theorists often downplay the influence of small studios that make up the majority of the creative industries in almost every sector and insists that such companies "remain both quantitatively and qualitatively significant" (Banks, 2007, p. 39). This is a circumstance that would be consistent with Simon's claims that game studies academics have neglected the indie movement (Simon, 2013). Connected to larger systemic changes that are bound up with the proliferation of the indie scene – new work practices, studio structures and modes of distribution – are concurrent changes in the types of themes being addressed and new types of narrative formation that often reconfigure the player's position inside the game space (as well as outside it) in fundamental ways. The ambition of this chapter has been to build on a significant amount of new work on the emergent indie game scene (Grabarczyk and Garda, 2016; O'Donnell et al., 2018; Ruffino, 2018a; Simon, 2013) to forward the argument that rather than being thought of as independent, the movement needs to be considered within a relationship of interdependency, indeterminacy and interconnectivity within the larger industry networks.

I hope I have shown here that, rather than being its other or a mere adjunct to it, the relation of the indie sector to AAA can be potently rethought and strongly involved in the destiny of the industry at large. Since small scale work in the indie sphere is often posited as an alternative to the mundane and repetitive work of AAA game development – which Lucas Pope characterises as: "'sit down and model these trees and this house and stuff.' Which I mean is fine, you've got to start somewhere [LP4] – It seems that although some general, heuristic assumptions about the nature of work within each sector of the industry can be formed, but in all cases context is actually vital and each studio, company or enterprise must be assessed on its own terms how exactly it falls between the two stools of creativity and commerce whilst acknowledging that even in the most seemingly utopian instances of corporate structures geared towards creative work and employee freedoms, commercial imperatives are always still at work, and even in the most seemingly buttoned down AAA monoliths collaborative poetics are in play in spite of all the barriers thrown up to it. This is especially important in the increasingly hybridised border regions of indie and AAA production.

Through an attempt to redraw the boundaries of indie and AAA as a relational actor-network, the two sectors have become gradually more interrelated and interdependent. Maintaining such rigid distinctions, rather than protecting the Indie sphere from commercial pollution or appropriation, which in any case is always already present since they must operate in the same marketplace and are subject to the same economic pressures, only serves to maintain the power of the dominant centre in a dichotomous relationship that casts the indie as the other. It is important to recognise that, as with any good ANT account of any given field, the reality is way more interconnected and "messy" (Law, 2004). Just as indie supposedly challenges the baked in assumptions of the AAA field, it simultaneously challenges academia by forcing us to seriously consider the material production contexts under which games are actually made. This complexity, and the challenge it brings to tidy

definitions, might go some way towards explaining why it has so frequently been skirted around as an object of study.

It is significant that, when speaking of the *République's* radical ending, that Payton relates it to *The Last of Us* (Naughty Dog, 2013) as a game that had the gall to pull off a similar stunt in the AAA space and, in a way that echoes Payton's effort, offered a "solid commentary about the role of the player and the role of the character" [RP36]. Not only does this suggest that the indie sector is not the exclusive domain of such decentring narratives, it shows as well how indie developers can be embolden by moves made by the AAA sector, just as the AAA sector can derive (or appropriate, depending on your view) new ideas tested in the experimental crucible of the indie sector. Its further warning that we should not give in to simplistic notions of a indie/AAA dualism where all the innovation is conferred on the former and all the spectacle and polish on the later. As Martin and Deuze suggest, "the distinctions between independent game development and corporate game development are not as pronounced as industry rhetoric depicts them" (2009, p. 278), and as I have shown here, more than the simple diametrically opposed sectors that games industry discourses posit, the relationship is co-constitutive and reciprocal. As Jennifer Whitson has also claimed this exchange is not just a symbolic one but is predicated on actual labour practices and the trajectories that they produce, where "the churn of indie developers fuels the creativity of larger mainstream studios as indie personnel come and go" (2013, pp. 125–126). In such a context ideas, resources and practices flowing in both directions through a complex and deeply interrelated network, and it is at the borderline of exchange (the semi-permeable membrane between the two sectors) where I contest that the most interesting work is produced through such reflexive moments of industry theorising through media texts. Because it is here, in the liminal space between AAA and indie, where the often divergent values and themes enter into discourse and inflect one another, producing what I have called breaking out narratives that act as points of critical reflection and industry theorising on wider industry processes and dominant or normative discourses.

This status quo is becoming newly challenged in various ways by the emergent formation of the indie sector, whose radical and complex operations are a key focal point of this thesis. The potential outcomes of this reassemblage of games culture around a continuum rather than a dichotomy, are far reaching and should be at the heart of game studies research going forward. For example, the networked manner I have presented the games industry has the potential to break down the highly constraining secrecy that O'Donnell finds to be a core characteristic of the games industry, and one of the means by which it continues to perpetuate the same sets of formula and norms. Such personal insights are perhaps characteristic of the emerging culture of openness and collaboration of indie game development, and the more open-source technologies and processes they are built upon, gives us to an unparalleled access to an increasing array of documents, personal accounts and other artefacts that potentially explode the black box of game development (provided we are critical enough to disaggregate industry theorising from promotional discourses, of course).

As Raymond Williams notes, what has to be remembered is that there is always the opportunity for a politics of resistance, since "no mode of production and therefore no dominant social order and therefore no dominant culture ever in reality includes or exhausts all human practice, human energy, and human intention" (2003, p. 125). The games industry is a big structure and leaks are inevitable, especially true if the AAA console ship is indeed sinking as some have claimed (Whitson, 2013). Just as the indie sphere draws its resources, and therefore some of its practices, from the dominant sphere, it recursively and indirectly feeds back its own innovative practices and ideas to the AAA industry acting as something like its unofficial R&D department, and with them, perhaps, go some subversive trace of newly emergent relations. Even if developers return to the fold of the AAA studios, as Simon Parkin observes they may be in a later survey to Fedor's (Parkin, 2017), they are no longer the same as the developers who left, their world view altered by their taste of freedom and their breaking out story. Fedor's survey reveals the very real conception of what can be called an

idealised form of indie, that very quickly topples on closer scrutiny, but still remains a potent myth

that, like the trade stories discussed in previous chapters, the industry ultimately benefits from

greatly. In short as people leave AAA to form their own experimental studios, the AAA studios draw

on fresh talent from large labour pools of new recruits, and later on can benefit from buying up

struggling indie studies and benefiting from the new ideas they have been able to generate. Even if,

as Emily Short points out, efforts like Payton's might only end up acting as R&D for the commercial

industry at large, there is still some value to have attempted to break free.

Chapter 4: 'Walking is the New Shooting': The walking simulator as emergent challenge to industry orthodoxy

The previous chapter has shown the AAA and indie sectors to be deeply interdependent and utilised actor-network theory to trace some of the networks of influence within and between them. I continue this process here, turning my attention to a significant and controversial new sub-genre of the indie movement – the walking simulator – in order to demonstrate how subversive processes extend far beyond isolated texts and studios into micro-movements. Drawing again on Foucault's genealogical approach and actor-network theory, the intention is to explore how the genre has come to form in this contingent socio-political moment around specific discourses that are linked to changing material and ideological processes of production. At the heart of this chapter are the trajectories of two developers: Steve Gaynor is a former designer of the *Bioshock* (2007-2014) series at Irrational Games, before going it alone to form indie studio The Fullbright Company (now simply known as Fullbright) where he created the influential *Gone Home* (2013). Secondly, Sean Vanaman formerly worked on the award winning *The Walking Dead* (2013) at Telltale Games before cofounding Campo Santo and creating *Firewatch* (2016).

Emerging in 2008 with the release of *Dear Esther* (The Chinese Room), which set the "fundaments of an approach to interactive narrative that is now informing a whole host of interesting titles" (Stuart, 2016), the term 'walking simulator' has come to apply to a group of predominantly independently produced videogames in which the player explores an emotionally charged environment and participates in reconstructing the diffuse story within it. With few mechanics beyond walking around and interacting with objects, it prioritises a deep focus on narrative and immersion over more agonistic elements that are typically seen to be at the heart of the ludic experience such as competitive challenge, or mechanical complexity (Carbo-Mascarell, 2016; Kagen, 2017; Muscat and Duckworth, 2018). The walking simulator perfectly aligns with the excluded others actor-network theory sees as falling outside prevailing networks (Latour, 1992; Law and Singleton, 2013),

embodying marginal practices that Keogh alludes to when he claims that the valorisation of difficulty, interactivity or non-linearity in mainstream gaming culture leads to such counter works as being "marginalized as lesser examples of the form" (2018a, pp. 180–181).

Derided by audiences at the privileged centres of gaming, this marginal practice has paradoxically moved to the very heart of the struggle between dominant hardcore and emergent players, casting into relief debates about what games are. For instance, Mia Consalvo and Christopher Paul conclude *Real Games*, their study of what is counted as legitimate in gaming culture, with the walking simulator arguing that it was flashpoint for "an attempt to exert control over changes in the industry that are including new players" (2019, p. 126). Consequently it can be argued that this genre exposes, better than anything, the latent ideology of the normative gamer community; hardcore gamers who view them as a threat to the prevailing orthodoxy of game production that has historically served their interests (Gursoy, 2013). Indeed, epistemological attacks on the identity and authenticity of such works as 'not real games' are frequently collated with reactionary political attitudes, as can be seen in this representative and highly emotive rant given by one user in response to *Tacoma* (2017), Fullbright's follow up to *Gone Home*, tellingly entitled 'Walking Simulators are dead and I couldn't be happier about it':

> Gamers have finally understood not to buy any more fake "games" from liberal idiots who can't keep their stupid politics off their "games" and because finally all these film school dropouts will be forced to find real jobs, ultimately improving the industry. I am eagerly looking forward to seeing how much of a financial flop Sean Vanaman (Campo Santo)'s new game is going to be, and I can't wait to see what sort of excuses he's going to make once the reality sets in that his career is over. (Ghibli BTFO, 2017)

This post clearly demonstrates the aggressive level of ill-will and conflict around the topic,[143] but also explicitly links the rhetorical claim of *Gone Home* as 'not a game' and *Gone Home* as overtly political.[144] A second important point the post reveals is that the author, being aware of not only the studio but the key individual behind the game's production, demonstrates a not insignificant knowledge of the industry and thus a clear investment in it maintaining a specific form. Retaining that status quo is pitched as a zero-sum game, where the survival of 'real games' aligned with core genres are predicated on the failure of specific individuals who threaten the medium by daring to appeal to audience diversity or alternate aesthetic modalities. This is not a casual accusation, then, but a firmly held belief that comes from a person deeply embedded in, and thus representative of, hardcore gamer culture; an entrenched ideological framework bound up with the normative interests of the industry. The irony here, that should not be lost on anyone, is that this very act of rejecting politics from games is deeply political in a conservative and reactionary sense. As Bruno Latour has argued any act of retracing the boundaries of a group (and such retracing is always occurring, because groups are fundamentally in flux), is an unavoidably political act (Latour, 2003, p. 149). One clear reason for this is that politics describes the asymmetry in power relations between two or more actors, and so defining a group against an anti-group, as this gamer is clearly doing, is an intrinsically political act. Indeed, Gee has seen all such discourse communities as involved in the struggle over 'social goods' which are "the stuff of politics" and that "since, when we use language, social goods and their distribution are always at stake, language is always 'political' in a deep sense" (Gee, 2014, p. 8).

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[143] The resulting heated argument ran to 55 responses until the topic was closed 6 days later, presumably by moderators who felt it was getting out of hand.

[144] Whilst it might be argued that one swallow does not a summer make, this quote is intended to illustrate a larger tendency that it is beyond the scope of this thesis to make, as it would require a full-blown audience reception study. I direct readers instead to the relevant chapter of Consalvo and Paul's (2019) book for a more detailed study that backs up this observation.

Additionally, walking simulators often directly relate to progressive topics, explore philosophical

issues or address marginalised identities often ignored by the commercial games industry. Indeed,

the genre has been widely linked to the emergence of disruptive new player and creator identities

(Kagen, 2018, 2017), including emerging audiences of female and queer players (Anthropy, 2012;

Chess, 2017; Juul, 2012; Shaw, 2015). Such scholars who value the genre couch this perceived 'lack'

of mechanical depth in more progressive terms as a form of resistance to stultifying commercial

formations that ossify games into rigid popular genres. For instance, Melissa Kagen (2017) argues

that walking simulators are a prominent subset of a larger category of 'anti-games', evoking

Alexander Galloway's famous notion of 'countergaming' (2006), which subverts the form with an

often politicised and self-reflexive flair. Meanwhile Bonnie Ruberg sees them as an embodiment of

an emerging queer tradition (2015), where dominant notions of fun and interaction are subverted

and problematised as heteronormative.

Likewise, many games journalists have welcomed the genre and celebrated this accessibility as a

desirable trait. This is a position summed up by Leigh Alexander in a piece for *The Atlantic*, which

stressed how "much of the criticism is so fervent you'd think the army of 18- to 24-year-old males

who make up the bulk of gaming's old-guard audience were deeply afraid the nature and purpose of

playing digital games might change" (2013). The article concludes by arguing that the game is

contributing towards a tendency to broaden the audience of gaming and its profile as an artform.

The appearance of articles such as this in high-brow, non-specialist publications is clear evidence of

the medium's embrace by broader educated and middle-class audiences as is evident by the

increase in high-profile exhibitions at artistic institutions like MoMA and the Victoria and Albert

Museum (Foulston and Volsing, 2018), and this is undoubtedly happening around specific

progressive games and genres like those under analysis here. By singling out such specific examples

this chapter inevitably plays into this discourse of canon formation, but this is acceptable, since as

ANT reminds us, it is impossible to think of scholarship as set apart from the processes they study

(Latour, 2005, p. 33). As academics we must avoid ascribing to the myth that we act as neutral observers and realise that we are as engaged in the struggle over what games are, and which ones are valuable, as much as journalists, developers and fandoms.

The introduction discussed how the agonistic qualities of games – manifesting as competitive challenge, violent struggle or mechanical complexity – are typically considered core to the medium by designers and orthodox academics alike (Costikyan, 2002, p. 14), part of which is the result of the inheritance from Roger Caillois of *agon* as the superior of the four classic play archetypes he identifies as core to games (2001, pp. 77–78). I also argued that notions of agon have become embedded in fundamental definitions of what games are from orthodox game studies, particularly within Jesper Juul's (2003) classic game model. I quoted this in full in the introduction but summarise it here as consisting of 1) a formalised system of rules (that requires internalisation and mastery), with a 2) quantifiable outcome (win/loss condition characteristic of zero-sum games), 3) that requires effort to overcome (struggle). Such agonistic elements are conspicuously and significantly absent from walking simulators, which is the source of much of the ire of those who dismiss the genre as 'not real games.'[145] Juul's definition is one of the more inclusive versions[146] of the formalist and structuralist models of games that emerged out of the ludologist movement but even here walking simulators appear to be excluded by definition since they are based on a rule-based system only in the broadest possible sense, they certainly don't have a variable and quantifiable outcome since they are often concerned with telling a particular story with a clear ending, and although the player certainly exerts mental effort in reassembling that story, this is hardly what Juul means by 'effort' – instead, he is drawing on Aarseth's breakthrough work *Cybertext*, which introduced the

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[145] For an instructive example see Ayse Gursoy's (2013, p. 57) study of the reception of *Dear Esther* (The Chinese Room, 2012), widely considered to by the patient zero of the walking simulator.
[146] Indeed, he is willing to admit in the essay that videogames have challenged the classic game model as it has pertained for centuries due to the medium's uniquely interactive characteristics, though narrative is still implied to be outside of these systems.

notion of the 'ergodic' nature of games, where "nontrivial effort is required to allow the reader to traverse the text" (1997, p. 1).

This chapter will argue that due to their lack of conformity to key characteristics of dominant videogame paradigms, the walking simulator can thus be understood to be at the heart of a struggle over changing definitions and material realities of videogame consumption and production. The two key strategies for doing so are their reassemblage of the key elements of dominant videogame culture, for instance through a strategic appropriation and subversion of the tropes of the first-person shooter (FPS) genre, and a critical decentring of the player from the heart of the narrative experience. And secondly, through a radical reconfiguration of gamic space that constitutes an act of domestication. Here I draw on M.M. Bakhtin's powerful notion of the chronotope to help unpack the political and social complexity of temporospatial structures, which I argue presents a potent alternative to the typical game spaces normally constructed around militarised notions of agonistic conflict (Fullerton et al., 2008) or colonial metaphors of domination and control (Fuller and Jenkins, 1995). This chapter explores this idea through close readings of two key texts in this genre and their various approaches to disarming the player; displacing them as empowered agents from the centre of the text as well as challenging their privileged position as dominant consumers within the industry and its wider discursive formations.

WHAT IS A WALKING SIMULATOR ANYWAY?

Genres within videogames are particularly fraught and fluid, leading writers like Gordon Calleja to suggest that Ludwig Wittgenstein's (2009, p. 36e) notion of 'family resemblances' might be more appropriate as they are not a "rigidly defined set" but one based on "the overlaps between various members of the family" (Calleja, 2011, p. 9). Just so here, it is vital to understand walking simulators as a coherent entity, but one heavily bound up with the FPS genre with which it shares many genetic

traits. Building on such notions of fluidity between formal characteristics of works, modern genre

theorists such as Rick Altman have aptly demonstrated the concept of genre itself as one in flux at

the level of production and consumption. Genres should not be understood as organised and

coherent structures defined and deployed by industry to organise its products, but as the result of

complex processes of negotiation between industry marketing, critical interpretation and audience

expectation; with the generic category itself ultimately coming to act "as regulatory schemes

facilitating the integration of diverse factions into a single social fabric" (1999, p. 208). But genre is

also understood as an incomplete 'multi-coded' process; as "a site of struggle among users" (Altman,

1999, p. 99). A genre emerges as the precarious and provisional result of such social production

where, "multiple groups who, by helping to define the genre, may be said to 'speak' the genre"

(Ibid.). Genres themselves emerge from the same agonistic social site of struggle that games tap into

and they gain their power from their alignment with specific groups, particularly highly dedicated

fandoms but also fiercely antagonistic opponents.

For instance, the following quote from *Urban Dictionary* is characteristic of the dismissive tone in

which the walking simulator moniker has predominantly been employed, significantly defining the

genre in terms of what it is lacking:

> A walking simulator is a type of video game which lacks many of the traditional aspects of a
>
> game (such as a goal, win/loss conditions, any kind of game system to interact with) despite
>
> taking the form of a video game. The phrase implies that there is basically nothing to do in
>
> the game other than walking around. (2CleverUsername, 2014)[147]

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[147] It is appropriate to draw on such a community definition, not only because ANT's claims that we should
"follow the actors" are by now ringing in our ears, but because the walking simulator label has been formed
from the very beginning in a ground-up fashion.

In the case of walking simulators, Consalvo and Paul argue (2019), rigidly deployed generic categories have been used to quarantine a set of works as 'non-games'; works that threaten an established community's definition of what a game is. Genre, then, is fundamentally discursive in nature, in the Foucauldian (2002) sense of the term, meaning that it is actively produced through efforts to articulate and describe it, but in the process also actively produces specific affinity groups (Gee, 2003, p. 27) or networks of actors, as well as constructing identities posited outside these groups to which it is opposed. I draw on the dialogic theories of language developed by M.M. Bakhtin (1982) to illustrate the terms of this displacement. Language, Bakhtin claimed, including all the derivative works of culture it produces, are fundamentally polyglottal (multi-voiced) since they always already contain unavoidable meanings and exist in contexts that pre-exist any attempt to speak them. Illustrative of the polyglottal nature of the walking simulator is the fact that just as hardcore players deride them for their lack of gameness, others use this quality to attempt to imagine a broader audience for the medium (Alexander, 2013).

Bakhtin's translator, Michael Holquist, in the Introduction to *The Dialogic Imagination* summarises the two forces, centrifugal and centripetal, to be "at the heart of everything Bakhtin ever did… The conception has as its enabling a priori an almost Manichean sense of opposition and struggle at the heart of existence, a ceaseless battle between centrifugal forces that seek to keep things apart, and centripetal forces that strive to make things cohere" (Holquist, 1982, p. xviii). On the surface at least, genre therefore acts as one of Bakhtin's centripetal forces (1982b, p. 272), pulling together and homogenising industry practice and audience expectation; unifying reception and production around the accepted norms of videogame culture. Genre is therefore also polyglottal, one of Bakhtin's centrifugal forces (1982b, p. 272), a valency of multiple voices in any given utterance able to blow apart calcified formations. This is because a genre is able to accommodate multiple interpretations for different collectives of social actors held in tension, with the dominant reading shifting along with the fortunes of these groups. Genres are constantly subject to reassessment as the boundaries

between these social groups themselves are constantly retraced via socio-political mechanism

(Latour, 2003, p. 149). Few genres illustrate these operations with as much clarity as the walking

simulator, which in the few years since its emergence has been bound up with the biggest

controversies in gaming.

The notion of 'folksonomy' (Wal, 2007) describes how definitions come to be formed by and through

communities, particularly relevant in Web 2.0 contexts, where participation driven websites and

configurable digital platforms provide extensive tools for user generated feedback. When titles like

Dear Esther began to appear on popular PC digital platform Steam, which boasts 33 million daily

users (Soper, 2017) and features significant community tools for categorising works, the label began

to be applied to them in earnest. As of writing the 'walking simulator' tag applies to 412 games on

the marketplace according to a third-party data aggregate site (Steamspy, 2019a) – an increase on

178 I observed in 2015 – indicating a rapid growth in its popularity amongst developers and/or an

increased awareness among Steam's users. Like all community driven tagging initiatives there may

be some conceptual slippage in its application (another tag that is often used in conjunction or in

place of it is the less ideologically loaded 'exploration'), but on inspection many of the games listed

seem to conform to the broadly recognisable traits of the genre: mechanical simplicity, a focus on

narrative over challenge, affective subject matter, and exploration of evocative spaces.

Despite resistance from the gaming press to the term (Clarke, 2017; Gerardi, 2017) and the

proposition of alternative titles such as 'wandering simulator' (Kagen, 2017) and even 'secret boxes'

(Goodwin, 2014), the label has stuck. The meaning of the term, and its attendant values, however,

continue to be hotly contested, with both sides of the struggle attempting to intervene in and

control the definition. For instance, in a *Guardian* interview Dan Pinchbeck asserts that, "I have no

problem with the term walking sim… I'm just owning that now" (Stuart, 2016). Kagen also notes

how, at the height of the tensions around the term, users actively changed the definition on sites

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like Urban Dictionary (like the one above) to read more negatively (2017, p. 289). Such clashes between sub-cultural identities (Dymek, 2012), their worldviews and taste cultures in the increasingly factional and heterogenous field of videogame culture, is in line with Bakhtin's notion of polyglossia where "within the arena of almost every utterance an intense interaction and struggle between one's own and another's word is being waged, a process in which they oppose or dialogically interanimate each other" (Bakhtin, 1982b, pp. 354–5). Within this shifting landscape the loosely descriptive and somewhat derogative term walking simulator has crystallised into a discursive generic category.

I have argued previously that as the scale of videogames has become ever more ambitious (Maiberg, 2016), and the AAA industry increasingly consolidated around a few big studios (Kline et al., 2003, pp. 171–172), genres are routinely hybridised to capture as many potential players as possible. Rather than opening up the medium, this hybridisation and excess of content imposes a regimented homogeneity sometimes referred to as 'the ever-game' – a game so 'complete' it fulfils all the players needs and desires, and endlessly chased as the holy grail of modern, commercial game design. Walking simulator's simplicity of focus and short play times (*Gone home* and *Firewatch* take around 3 hours to play) are a significant deviations from the exigencies and imperatives of modern commercial game design. This stripping back of systemic depth is highly unconventional in an industry marked by a well-observed crushing forward momentum that rarely stops to look back (Newman, 2012).

Much modern commercial game design is constructed around the mechanic of shooting. Shooting mechanics are discussed endlessly on forums and in reviews at a highly granular level, making them the clearest locus of the mythical and ambiguous 'game feel' (Swink, 2008). Perhaps the most extreme example of how single-mindedly hardcore gamers identify with this mechanic can be seen on the occasions when developers are bombarded with death threats after 'nerfing' (reducing the

power) of a favourite gun (Hernandez, 2013). Meanwhile, In this context the *Counter-Strike: Global Offensive* mod by Nipper that transforms *Gone Home* into a first-person shooter (Matulef, 2014a) can be viewed not only as a humorous parody of modern gaming's mechanically reductive set of concerns that renders everything into a violent arena of agonistic struggle, but as recognition of the game's fraught position in relation to the FPS and as a site of struggle between hardcore and new audiences. The reason that walking should be seen as so distasteful an activity to base a game genre around is that games, especially AAA games that appeal to the core player base, have traditionally been built around verbs more aligned with exercising power fantasies of the player – acrobatic jumping or skill-based shooting being high on the list. Amanda Phillips has traced the cultural significance of the headshot through the cultural imaginary (from the real life trauma of JFK's assassination to its use in action movies), but shows how games utterly enshrined the headshot as an extreme marker of skill, in spite of the fact that in real military contexts (which many FPS games endeavour to emulate) snipers are trained to avoid them due to their difficulty resulting from "the range at which they engage their targets and the risk of exposure that comes from taking multiple shots" (A. Phillips, 2015, p. 140). This reveals the way dominant values in games circulate around agonistic notions of highly complex skill-based play on a mechanical level and violent interactions on a narrative level, even if these bear little resemblance to the 'realism' such games also chase. The fact that walking sims reject both of these excessively macho positions is highly revealing of the subversive relationship of this genre vis-à-vis the FPS.

My interview with Steve Gaynor demonstrated his awareness of these factors and framed his work as deliberate attempt to identify himself as part of a new generation of designers willing to experiment with established forms by "[taking] the game literacy they have and do things with it that we wouldn't normally see otherwise" [SG29], eschewing the approach of the commercial industry with its huge budgets and the need for high returns, for one designed to find, develop and serve smaller audiences. Just as I argued above using the example of *République*, the breaking out

stories of indie developers often manifest in games via a desire to work against the grain of the kinds

of experiences they had crafted in former AAA studios. This rarely sees them being rejected entirely,

but rather acting as heavily modified foundations from which new ideas can be constructed. For

Gaynor this involved a specific and highly intentional attempt to jettison the RPG and shooting

elements of Bioshock most strongly associated with the Ur-genre of the open-world action

adventure genre:

> We'd all worked on the Bioshock series together and our basic thinking was that if we
>
> effectively just took the combat out of Bioshock and took out the RPGish elements and stuff,
>
> if it was just the aspect of exploring an immersive environment and finding the story there
>
> through environmental storytelling and audio diaries… if that was going to be basically the
>
> whole game, or the heart of the game – the core gameplay – instead of a side element.
>
> [SG3]

For Gaynor, this pre-existing 'game literacy' derives from his experience working at Irrational Games

for the *Bioshock* series (2007-2013), which endeavoured to explore more mature, philosophical

issues through its fiction and mechanics (Jackson, 2014), yet still operated strongly in what might be

called a masculine design paradigm built around conflict, violence and what Fullerton et al. have

described as "a predominantly male concern that space is potentially dangerous and always

contested" (Fullerton et al., 2008, p. 1). Here, in *Gone Home*, Gaynor is freer to pursue more radical

ideas. But crafting such new experiences is a coordinated gamble, since the success of these games

depends on the existence of an audience hungry for new ideas and willing to embrace the peculiar

proposition of a game with little to no gameplay; an audience that had hitherto only been

speculated to exist (see the discussion of exploration motivated gamers in Bateman and Boon, 2005,

p. 67). Indeed, imagining the existence of a new audience from within the confines of the industry

spiral and the hegemony of play, which constantly work as centripetal forces to homogenise and

format, represents a bold feat of industry theorising that serves as a centrifugal force pushing outwards on the intensely formalised and calcified structures of the commercial games industry, explored in chapter 2. The following optimistic assertion about the audience from Sean Vanaman below is a good example of such a feat of centrifugal industry theorising, which seeks to address a perceived gap by orienting his own studio to become an obligatory passage point:

> the audience is maturing and widening. Your hurdle to be able to play games beyond having just the literacy of 'how do you press the buttons to make stuff happen,' is getting way less complex… So I just think everybody's matured a little bit, but never the less it's pretty obvious that the content is lagging behind, so we see, from a business side, I think we see Campo Santo's ability to be at the forefront of this really hungry underserved audience. [SV8]

If it is true that, as Ien Ang has claimed, the audience only exists as a spectre "an abstraction constructed from the vantage point of the institutions, in the interest of institutions" (1991, p. 2), then the efforts of creators like Gaynor and Vanaman constitute a profound attempt to not only reimagine that audience, but by taking the risk of setting up their own studio to cater for them, help bring them into being and stabilise them around a new counter-canon of works. If, as Latour (1988, p. 93) has famously claimed, reality is that which endures after all trials of strength have been exhausted, then that audience has been proven to exist thanks to the impressive critical and commercial success of these games, for instance, both *Gone Home* and *Firewatch* have both breached a million sales, in spite of the extreme backlash against them from core gamers. By performing a textual analysis of these two key works, that as per my method extends an awareness of the production context into the text itself, I explore some of the elements that help to construct these new audiences and genres.

GONE HOME: DOMESTICATING THE FIRST-PERSON SHOOTER

An analysis of *Gone Home* allows us to examine the implications of this new genre, especially in terms of its ontological approach to space and how this may facilitate the formation of new player subjectivities. *Gone Home* is the ideal case study, not only because it achieved a considerable amount of critical and commercial success, but because it has been given the tag 'walking simulator' by an incredible 3316 users on Steam (Steamspy, 2019b), making it the undisputed doyen of the genre. Unlike the agonistic battlefields of the FPS (Fullerton et al., 2008; A. Phillips, 2015), *Gone Home* unfolds in the simple domestic space of a large house in which a highly personal story unfurls.

This story is experienced indirectly by the player through the eyes of a young female student, Kaitlin Greenbriar, returning from a year abroad in Europe – a far cry from the middle-aged, white male protagonists that have become the stock-in-trade of the industry (Kaiser, 2014). Instead of the warm embrace of her family, Katie is greeted with an ominous note from her younger sister Samantha, and beyond that an empty house strewn with the detritus of the early 1990s. The narrative centres around the discovery and unfolding of Sam's sexual awakening and coming out, and the tensions this causes with their conservative parents. This is significantly one of the first high-profile instances of a LGBTQ+ narrative at the heart of a commercially successful videogame, and its sensitive handling has seen it praised by many queer commentators (Kate, 2013; Kopas, 2017; Riendeau, 2013). *Gone Home's* female character and non-normative themes are undoubtedly related to the dismissive backlash the game has suffered at the hands of a reactionary hardcore player base.

In a high profile talk at The Game Developer's Conference entitled 'Why *Gone Home* is a Game', Gaynor contrasts the reactionary position of many gamers who attacked the game online and called it a "conspiracy" (read: feminist conspiracy) with the paradoxically positive response of mainstream gaming media, prompting him to ask: "how is Gone Home not a game but also game of the year"

(2014). To resolve this tension, Gaynor strategically attempts to broaden the definition of what constitutes a videogame, noting that part of this disconnect is based on expectations built up over the years as to what a game is or should be by the industry, which are now taken as natural and unquestioned norms throughout the fan base. *Gone Home* is consequently seen to be lacking many of the characteristics of the dominant videogame form since it possesses no combat or puzzles, no story branching or player builds, no fail state and a very short runtime (Ibid.). To counter this naturalised, conventionalised notion of a game, Gaynor offers a counter taxonomy based on variability of player experience, a focus on player agency and a spirit of playfulness. Notably these categories are much broader than the prescriptive and rigid definitions that Gaynor is pushing back against, and which clearly echo elements of Juul's (2003) classic games model. In particular, none of Gaynor's categories allude in any way to the agonistic or ergodic qualities normally prized in games, instead emphasising the importance of player experience in a broad sense. This playful spirit is evident by the fact that some players have found unanticipated ways to express themselves through the game's systemic affordances; for instance by collecting all the game's small objects and cataloguing those that are meaningful to a specific character (forming them into pseudo-shrines), which gives a literal spin to Henry Jenkin's claim that the encyclopaedic and spatial nature of games turns them into a "memory palace" (2004a). Clearly the game has sufficient systemic depth to support emergent gameplay, a defining characteristic of videogames as a medium (Jenkins, 2004a; Juul, 2011), even if that emergent gameplay doesn't involve shooting things in the face.

In doing so, he consciously turns the narrative, mechanical and emotional potential of the hybrid mainstream form to non-violent ends through a selective appropriation and refocusing of its elements. Gaynor's previous work on *Bioshock* Series is itself a complex fusion of FPS, RPG and deeply narrative branching experience is a typical example of a highly hybridised commercial videogame. Here Gaynor refers to such works as "gamey games… capital G Games" (Gaynor, 2014) to illustrate this qualitative distinction with his work on *Gone Home*. For Gaynor, *Gone Home* is

certainly interactive, but that interactivity takes a very different form to the typical gunplay and acrobatics that normally regulates a player's encounter with a virtual environment, and largely takes place in the high-level structure of the unfolding narrative experience, even though on the low-level of moment to moment gameplay (which is normally emphasised in ludological accounts) the range of mechanics appear very limited. Alexander Galloway has famously described the "kernel image" of the first-person shooter genre, a constitutive element of *Bioshock*, as "a subjective camera perspective, coupled with a weapon in the foreground" (2006, p. 57), but in *Gone Home* the subjective perspective is explicitly maintained whilst the weapon, and thus the violent means of interaction it imposes on the player, is jettisoned; a deconstructive gesture that also by association rejects much of the culture of militarised masculinity the gun has come to represent in gaming. The player has been potently disarmed.

Gaynor is here careful to avoid sounding overtly oppositional or de(con)structive in contrasting *Gone Home* with his previous work, which is unsurprising given that independent developers rarely come off well for deliberately and directly antagonising their audiences.[148] Instead he characterises this process in less antagonistic terms as, "less of questioning the tropes and the assumptions of the existing genres that those forms are used for and more of saying 'what else can these tools express?'" [SG26]. The very process of turning this form to new expressive ends, which is itself a kind of bricolage (a case of using the master's tools to dismantle his house) in Derridean (2001, p. 357) terms, can certainly be seen itself as an act of resistance, but an act of resistance carefully couched in rhetorical terms that stress an expansion of the diversity of videogame experiences rather than the mechanical closing down of interaction the nature of the game initially suggests.

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[148] Phil Fish's exodus from the industry after a high profile stand-off with a journalist is a case in point (Handrahan, 2013).

The Katherine Cross essay 'The Nightmare is Over', helps us to appreciate the diplomatic nature of this statement since she stresses the strategic importance of making additive rather than subtractive moves when positing the need for increased diversity to an audience that is "bedevilled by the ghosts of censors past" (2017, p. 184). Here she is referring particularly to the media effects debate and the spectre of anti-violence activist Jack Thompson (for a discussion of this controversy see Jenkins, 2006b), whose high profile campaign to ban videogames, subsequently conditioned gamers to read any new criticism of their object of desire in similarly destructive terms, as the responses to *Gone Home* Gaynor collates in his presentation and which abound on Steam forums clearly indicate. Indeed such a sense of victimisation displayed by hardcore gamers, couched in the notion that one person's gain is inevitably another's loss, can be explained by notions of the 'zero sum game' of game theory, which is deeply bound up in the structure of games and their emphasis on win/loss conditions (Galloway, 2006, p. 101; Kline et al., 2003, p. 89). As discussed in the introduction, games were a product of the cold war environment of military funding and rampant paranoia just as much as the nuclear stockpile and its attendant philosophy of mutually assured destruction (MAD), and so it is little wonder that gamers should become influenced by the underpinning notions of game theory that had seeped into their systems from the very beginning.

As cultural objects, games produce the kind of players they need to perpetuate themselves, which is a core argument made in *Games of Empire* (Dyer-Witheford and de Peuter, 2009). Just as some have argued that structures of play like competitiveness and perseverance similarly inculcate players as ideal workers in game industry contexts and undermine the kinds of solidarity necessary to establish unions (Legault and Weststar, 2015), it can be observed that gamers are similarly conditioned by the structures and rule sets of their favourite games to resist loss at all costs and extend this practice to the wider cultural exchanges they make about games, particularly those that take place on the gamified and algorithmic spaces of the internet (Cheney-Lippold, 2017; Massanari, 2017; Noble, 2018). This 'loss-aversion' tendency partially explains the hostility feminist reformers like Anita

Sarkeesian have faced when launching legitimate academically motivated critiques of games like *Feminist Frequencies* (2009), where a cavalcade of death and rape threats launched at her seemed deeply disproportionate to such modest efforts to apply longstanding traditions of gender theory to the videogame medium. It also explains the centrality of sites like Reddit, 4chan and 8chan[149] where gamers organise around the regressive banner of Gamergate, recruit members and exchange strategies for harassment campaigns that are structured with the operational logic of games forming extensions of hegemonic and antagonistic norms of play. Perhaps the ultimate proof of this is that one of the most notorious responses to Sarkeesian's criticisms took the form of an online game in which players could beat up the critic (O'Meara, 2012).

But, as was evident in the breaking out narrative I introduced in the previous chapter, entering the territory of transgressive game design from the formerly normative territory of AAA is not a clean break or a fully intentional act, but is itself a faltering, partial and precarious process. Steve Gaynor's transition acts as a perfect analogy for this process. In particular Gaynor, himself a straight man, had to negotiate the challenges of writing a convincing queer female protagonist in a medium that had little experience of either and has reflected on the difficulty of this process extensively in documents supporting the production:

> It's easy to assume that there are parts of writing the perspective that are default, or neutral, or that this aspect of the character doesn't have any subtext to it, or isn't gendered. But actually, it's gendered male, you just aren't aware of it, because it's default to you... At that point, it's really a question of taking it seriously, taking the job and the risk seriously.
>
> (Steve Gaynor quoted in Fyfe, 2015a)

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[149] Part of the 'dark web' not listed in Google searches, 8chan is the site the most ardent Gamergaters migrated to when popular web-forum 4chan proved to be too restrictive for their extremist views.

The notion of questioning the naturalised ideology of male privilege, as discussed by the likes of Peggy McIntosh as "an invisible package of unearned assets that I can count on cashing in each day, but a bout which I was "meant" to remain oblivious" (McIntosh, 2019), is here associated to the general risk of breaking out as an indie developer – explicitly imagining the indie production context as a platform for progressive new stories.

Although Gaynor claims this to be a matter of adequate research and a sympathetic approach, the progressive credentials of *Gone Home*, and particularly Gaynor's ability to depict perspectives that are not his own, have been criticised by scholars such as Dimitrios Pavlounis (2016). It is my feeling that it is important for established industry figures like Gaynor to leverage their cultural capital and make bold plays to create believable and diverse characters (See Bowman, 2019b for more on this perspective and a critique of Pavlounis' position). Rhianna Pratchett has spoken about the anxieties of straight, white, male developers whose experience falls within the normative bounds of identity being nervous "about straying outside those familiar grounds" (Rhianna Pratchett quoted in Lejacq, 2013). For Pratchett this is why the same characters get repeated time and again – what one journalist calls the 'scruffy white male problem' (Kaiser, 2014) and Pratchett refers to as "Whitey McStubbly" (Rhianna Pratchett quoted in Lejacq, 2013). But crucially for Pratchett this is not something that will change solely from outside pressure but takes responsible establishment figures like Gaynor making risky plays on the inside, rather than shying away from potential controversy she asserts that is necessary for those from the dominant centre with normative identities to also speak up on behalf of marginalised identities and to not be "afraid to write about characters who aren't them. That's what writers do!" (ibid).

At this point it is also important to remember that Gaynor, although the founder and head of Fullbright, is not reducible to it, and part of the networks that brought the game to fruition are his fellow employees including Kate Craig, who is responsible for most of the 3D art in the game and is

herself part of the LGBTQ+ community the game seeks to represent. Interestingly, criticisms of *Gone Home*'s handling of queer subjectivity have tended to exclusively focus on Steve Gaynor as its author, writing from an appropriative stance (Myers, 2013; Pavlounis, 2016), rather than seeing the work as the product of a studio. One can speculate that as part of such a small team Kate's influence can inevitably be felt on the finished product, steering it towards a more authentic portrayal of the character's coming out, which has resonated so strongly with so many queer commentators and players (Kate, 2013; Kopas, 2017; Riendeau, 2013). *Gone Home* is thus a direct example of the benefits the kind of diversified workforce that many, including Rhianna Pratchett, have called for. Such an influence is hard to categorically prove in the somewhat chaotic crucible of game development without a much more in depth anthropology of the game studio, ideally over the course of its production (such embedded anthropological accounts of production are few and far between and a deeply necessary strand of future research), but a general influence of team members on the finished product can still be felt through the finished work as well as being glimpsed through statements made in interviews, and as my discussion of collaborative poetics above ultimately shows the messy reality of game production can never be reduced to a single individual. For instance, Gaynor has explicitly downplayed his own role as writer, suggesting instead that the narrative is an emergent property of the inner workings of the studio as much as it is a product of the dynamic systems of the game:

> My job is not to be the writer of the game — the job is to manage the overall design and player experience, and then write the story that supports that. And then be the person who's running the company, and making sure that people are getting paid, and working well together, and we're promoting the game. (Fyfe, 2015a)

This dispersal of vision and agency provides an interesting twist on the usual understanding of emergent narrative, such as that put forward by Henry Jenkin's in which they "are not prestructured

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or preprogrammed, taking shape through the game play, yet they are not as unstructured, chaotic, and frustrating as life itself" (Jenkins, 2004a). But as Jenkin's reminds us, not just *any* story, but the specific arrangement of narrative elements that the collection of actors that make up the studio are primed to develop based on their collective experiences as they are sheparded into reality via the processes by which they work. Drawing on urban designer Kevin Lynch's classic *Image of the City* (Lynch, 1960), where he discusses how the design of urban spaces should create the basis for a range of stories to unfold and thus should not be too prescriptive in their function, Jenkin's insists that the spatial context is an essential component in the production of a range of emergent stories, and as the previous chapter demonstrated this is as true of the spatial affordances of the studio as it is the virtual spaces of the game. Here the studio itself acts in a similar manner to the platform in platform studies, providing a technosocial structure from which a series of immaterial processes emerge and which are pre-structured by the characteristics of the material platform.

In this way we can see how the writing and design of the game rests upon the larger foundation of the studio from which it emerges, the composition of which act as a series of constraints and affordances from which the narrative is built, and which it ultimately becomes a reflection of. In his work on the game studio as a unit of analysis James Ash adapts Peter Sloterdijk's (2011) philosophical enquiry into spheres and atmospheres to develop a similar idea of the studio as a space of intimacy and refuge, reimagining the studio "not as geometric containers in which action takes place, but instead as a series of co-existent spheres and atmospheres that shape the possibilities for action of those who work in studio settings" (Ash, 2015, p. 91). In such a scenario, the movements and atmospheres of the actors within become the set of dynamic systems that can produce the emergent story. The fact that indie development so often takes place in the domestic space of a house, as demonstrated by my reading of *Gone Home's* production context below, is a material instantiation of these spheres of intimacy, and a deliberate reorientation away from the

perceived factory nature of AAA development in which many see themselves as a mere cog in an impersonal machine (Beaudoin, 2016).

The ability to link the personality of the game so directly with the identity of the studio is a testament to the transparency with which indie studios attempt to operate (often running production blogs and communicating directly to audiences through social media rather than through press releases and large scale presentations), but is also the mechanism by which Steam users like the one quoted above are able to assign not only responsibility but direct culpability to individual actors. Being cynical we might say that such gestures towards transparency are mere forms of branding and performance designed to present the studio as a counter-cultural alternative to the prevailing industry norms, but the net effect of this self-promotion still results in a destabilising effect on those dominant structures, regardless of the intent behind it, prompting the AAA industry to adapt and change in light of it. For instance, above I examined the adoption of agile methods in AAA studios as a means of emulating some of the collaborative poetics of indie development, but it is also now commonplace to see larger studios also emulating the supposed transparency of indie studios by communicating directly with their fandoms, the most potent example being Nintendo's decision to break away from the E3 press conference circuit to communicate directly with their audience through their 'Treehouse' live streams. Such a changing relationship between consumers and producers has also led to the emergence of the community manager as a key interstitial role in game development, mediating between the external audience and the internal studio networks (Castello, 2020; deWinter et al., 2017; Humphries, 2013; Zimmerman, 2019).[150]

This new level of familiarization between audience and work is discussed by studio studies theorists via the concept that the studio itself is expanding into the wider world via a process of studiofication

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[150] Although it is beyond the scope of this thesis to unpack the complex nature of the community manager, I believe it is an important and under-studied role that I intend to tackle in depth in future projects.

(Michael, 2015). This studiofication of the world also runs parallel to the wider discourses of participatory culture (Jenkins, 2012, p. 279, 2008; Planells, 2017) that sees a breaking down of the divisions between consumer and producer that has led to the coining of the term prosumer (an analogue on the audience side of the notion of playbour discussed in chapter 2 on the production side). Crucially, the intimacy between audience and producer such a new consumption mode relies on correlates to a networked intimacy within the small team of the indie microstudio. Drawing on Luhmann, Farías and Wilkie introduce this notion of intimacy to "[describe] a situation in which 'a clear cut attribution of duties and responsibilities […]is[…] no longer possible'" (Farías and Wilkie, 2015, p. xx). The game's domestic setting, then, functions as an ideal metaphor for this new-found intimacy of the production studio and benefits from an analysis through the theoretical lens of Bakhtin's notion of the 'chronotope', which he describes as:

> the intrinsic connectedness of temporal and spatial relationships… fused into one carefully thought-out, concrete whole. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and responsive to the movements of time, plot and history. (Bakhtin, 1982c, p. 84)

Bakhtin developed the chronotope to describe a fusion of spatial-temporal structures into a narrative motif (Bakhtin, 1982a). Elsewhere (Bowman, 2019b) I have used this spatio-temporal tool to unpack the political and social complexity of the domestic space of *Gone Home*, which I argue presents a potent alternative to the typical game spaces normally constructed around militarised notions of agonistic conflict (Fullerton et al., 2008) or colonial metaphors of domination and control (Fuller and Jenkins, 1995). Such spatio-temporal motifs emerge at specific historically contingent moments to provide potent concrete structures around which specific subjectivities come to form, or to reflect upon their formation. Such spaces afford, constrain and shape certain types of interactions and narratives, and as social geographers have long argued (Lynch, 1960; Tuan, 1977),

the human experience of space is complex and deeply constitutive our worldviews. As a highly

spatial media (Jenkins, 2004a), videogames are well suited to contribute to this process, especially

since they directly simulate such spaces. The chronotope became a crucial figure in Bakhtin's larger

philosophy of the dialogic (read: interactive), and it is so not only because it fuses time and space

into a highly expressive literary image, but because it extends out from the text to link the author

and reader in a reciprocal bond that recalls the cybernetic feedback loop that game studies theorists

like Aarseth (1997, p. 1) have seen as a fundamental property of videogames. This makes it a

particularly relevant theory to both the interactivity of videogames and the understanding of

intimacy I have drawn on above. As a literary concept, it is also well suited to a genre like the walking

simulator that seems heavily influenced by the hermeneutic structures of reading, a trait which has

become the stigmata of its otherness from conventional agonistic and ludic qualities of games

(Bogost, 2017).

In the adventure novels of the past Bakhtin finds chronotopes of the meeting, the road, and the

agora, which are themselves structures so often explored in mainstream videogames constructed

around quest narratives that draw from the structural dynamics proposed by narrative theorists like

Joseph Campbell's (1993) 'hero's journey' and Vladamir Propp's (2010) 'morphology of the folktale'

(famously and extensively explored by Murray, 1997). In his article 'Complete Freedom of

Movement', Henry Jenkins' (1998a) argues that games act as 'digital backyards', replacing the

dwindling reserves of real-life wilderness that fuelled traditional boy's culture. For Jenkins, such

games tend to replicate the tropes and traits of male young adult adventure fiction such as *The*

Adventures of Huckleberry Finn (Twain, 2014), whilst works oriented toward female readers like *The*

Secret Garden (Burnett, 2015) evoke the intimacy of a formalised domestic space instead. Such

literature tended to socialise children to specific, sanctioned gender roles through a set of binary

distinctions that are mapped onto the gender binary: society/nature, adventure/domesticity,

outside/inside. In each case the former term is considered the privileged pole of the dichotomy and

associated with masculinity. By tracing specific genres of games from those traditions, Jenkin's

shows how game spaces are gendered and continue these tropes of socialisation in digital spaces.[151]

Jenkin's identifies as the dominant expression of videogame culture within such games as a

tendency towards the mastery and domination of spaces "the central virtues of video game culture

are mastery (over the technical skills required by the games) and self-control (manual dexterity)"

(Jenkins, 1998b) and in an early article with Mary Fuller has further linked this mastery to the

colonial impulse of domination: "Nintendo takes children and their own needs to master their social

space and turns them into virtual colonists driven by a desire to master and control digital space"

(Fuller and Jenkins, 1995). This core principle of mastery and domination correlates clearly to the

agonistic qualities I have been arguing are core to commercial videogame practices.

Gone Home instead utilises the highly constrained and private chronotope of an empty house, which

not only recalls horror conventions that are relentlessly subverted by the game in favour of normal

explanations, but provides a suitable temporo-spatial architecture for the story to unfold in, that

accords with Henry Jenkins influential notion of spatial storytelling (2004a). By replacing the

traditional virtual backyards of AAA games culture with its domestic space, *Gone Home* presents a

potent homely chronotope that serves to sever it from the traditional outdoor spaces of dominant

games culture and their emphasis on mastery and traversal of an expansive domain. It thus

reimagines the house as a novel space[152] for exploring a new kind of subjectivity; one of intimacy

and emotional interiority. Further, it attempts to reinstate the domestic space critically as one

oriented around refuge and personal growth, but rejects the sexist implications (most notably

through its aesthetic commitment to the *Riot grrrl* feminist punk movement) inherent in traditional

gendered notions of domesticity, which revolve around house-keeping and that Shira Chess (2017,

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[151] Shira Chess's study of female oriented games, for instance, finds that casual games aimed at female audiences, like *Cooking Mama* (Office Create, 2006) and *Diner Dash* (Gamelab, 2004), tend to be focused around similar themes of servitude, care-giving and domestic tasks rather than adventures in far flung exotic spaces that determine most games in the action-adventure genre aimed at males (2017, pp. 98–99).
[152] Pun intended.

pp. 98–99) has noted manifest crudely in many female oriented casual games that are ultimately

often metaphors about tidying up.[153]

Indeed, domestic spaces like any other are not neutral but internalise certain gendered assumptions

and these bleed into works through production contexts, as illustrated by Laine Nooney in her

historically revisionist work on Sierra Online and the early adventure genre. In her analysis of

Mystery House (On-line Systems, 1980), Nooney emphasises how the adventure genre, on the

foundations of which *Gone Home* is subtly constructed, was equally domestic in its origins. She

speculates that Roberta Williams, its developer and a figure she attempts to unearth from her

tenuous and oft-overlooked status in patrilinear histories of game development, must have worked

at a kitchen table in a traditional suburban open-plan house layout that allowed the housewife to

work on dinner (or in this case a game script) whilst still observing the children at play in another

room: "it is about what was most everyday for Roberta Williams, what was not simply a context but

a material instantiation, her self's most intimate horizon of possibility and imagination: home"

(Nooney, 2013). As Nooney observes, the home is so strongly linked to the affective labour

(Hochschild, 2012) of females that its presence in any work of fiction cannot pass without a nuanced

gender critique of its usage. Further to this, home is a potent emotional context as Roberta

Rubenstein has argued, it is "not merely a physical structure or geographical location but always an

emotional space" (Rubenstein, 2001, p. 1) and Gaspard Bachelard famously employed it in a book-

length psycho-geographical meditation on the emotional power of space (Bachelard, 1964).

According to some feminists, the domestic setting, and the genre of the melodrama that so often

unfolds within its walls,[154] whilst a site of feminine labour that historically "may at points intersect

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[153] See Chess's highly engaging reading of the popular casual 'hidden object' genre as a kind of hoovering, in that volume.

[154] In 'Game Design as Narrative Architecture' Henry Jenkin's argues that the melodrama is a format that potentially fits an alternative approach to space and ontology, but remains unexplored by game designers as a "model for how an embedded story might work, as we read letters and diaries, snoop around in bedroom drawers and closets, in search of secrets that might shed light on the relationships between characters"

and even collaborate with patriarchal power" also has the potential to transform these relations, providing the context to "produce a female subject in the act of resisting patriarchal power" (Romero, 1997, p. 78). This potential for resistance can be seen in such subversive gestures as Roberta Williams' choice to situate a secret passage in the kitchen of *Mystery House*, which can only be accessed by smashing its walls with a sledgehammer and thus symbolically breaching its gendered containment, or indeed in the conclusion of *Gone Home* which sees the domestic space ultimately rejected by its characters as stiflingly heteronormative.

Crucially the game is not only set in the intimate domestic space of the Greenbriar house, but has been made in a similar home-studio, a kind of space that Laurie Waller describes as the "conjoining of artistic laboratory and domestic dwelling," which characteristically of this hybrid function not only "site[s] invention in a context of everyday life, but also incorporates into studio experiments various practices, procedures and materials that might otherwise be dismissed as uninventive modes of domesticity" (Waller, 2015, p. 160). The fresh perspective such ANT informed studio studies work can bring to these interpretive spaces ties into Nooney's approach to historiography, where she attempts to eschew "the universalizing or magical divination of technological, ludic, or literary genius" and its patrilineal tendencies – the videogame equivalent of the 'great man view of history' – "in favor of a more grounded, sympathetic account of human affective forces (such as talent, creativity, drive) within a specific spatio-temporal context" (2017, p. 74). Bakhtin's notion of the chronotope ties very neatly into this ambition since it also attempts to locate "where spatial and temporal orientations coalesce" (Nooney, 2013).

The chronotope is, in this sense, also a useful construct to apply to the games industry discourses, providing a metaphor for the kinds of stories that it tells itself. For instance, the discourses

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(Jenkins, 2004a). Ironically in doing so he has predicted the creation of *Gone Home*, ten years before its actual development.

addressed in the previous chapter depicted industry migration from AAA to indie as an 'exodus', the space such an exodus arrives at is frequently the indie microstudio, helping to configure a new type of creative identity, born of the struggle of an exodus from AAA to the promised land of self-determination that lies at the heart of a romanticised indie subjectivity based on intimacy and emblemised in a romantic, secluded house. This domestic studio, because indie microstudios are so frequently also domestic home studios in which the team exists as a kind of dysfunctional family, can be thought of as such a chronotope, forming a new rhetorical structure that allows for certain types of interactions, narrative structures and subjectivities to form. It is one that must be treated with suspicion also, since it echoes the kind of idealised liberational discourses figures like Richard Florida evoked in their notions of the creative class (2014), and which became so bound up in neoliberal developments of the creative economy and entrepreneurship explored in chapter 2. However, I would argue that what differs in this account from Florida's is that the home studio provides a place of refuge from, rather than simply an instrumentalization of the private space under the auspices of the gig economy and the blurring of boundaries between work and play found in notions of playbour. Rather than acting as freelancers on someone else's project there is a strong sense here that the developers are calling some of their own shots, even if there is ultimately no way to completely escape the larger economic networks they are forced to play within.

Whether a private site of personal growth or a space now compromised by neoliberal economic relations like freelancing, such chronotopic devices as the home/studio hybrid are a powerful rhetorical device and, like the breaking out stories discussed earlier, they can be used by a variety of actors for a variety of purposes. They ultimately help open up new discursive possibilities, making emergent new formations of creative identity possible. Such a process can be seen in journalistic coverage of Fullbright which often emphasises its close-knit familial structure as a point of distinction from AAA industry. For instance, the header of the large scale *Polygon* feature appropriately named 'Meet Me in Portland: The Fullbright Company's Journey Home' (Mahardy,

2013) is a case in point, emblazoned with the artist impression of the Greenbriar home, the key

publicity art used for the game. With the homely hazy night sky and the warm glow of a light in the

bedroom window, the dollhouse like image has a coy homeliness that belies the anxious experience

of playing the game, another indicator of the developer's attempt to play with expectations. The

opening sets the tone for the entire piece, summing up an atmosphere of intense nostalgic

dreaminess:

> There's this house in Northeast Portland. A green Cape Cod, with moss on the roof and a
>
> hammock in the backyard. The kind of place where you want to raise a family, maybe retire
>
> to, if the Pacific Northwest is your thing. (Mahardy, 2013)

Its inhabitants are all named here – Steve Gaynor, Karla Zimonja, Johnnemann Nordhagen and Kate

Craig – some of whom followed Gaynor from Irrational Games, and are referred to like members of a

family; a relationship that is reinforced by a range of photos complete with the vignetting and black

and white filter effects that remediate the affective tonalities of a dusty photo album. Immediately

after introducing the team's prior work on such games as *Bioshock Infinite* (Irrational Games, 2013)

and *The Bureau: XCOM Declassified* (2K Marin, 2013) the author states that now "they're making a

new house" (Mahardy, 2013), explicitly linking the act of creating a videogame with the life

milestone of starting a family, but this statement is immediately revealed to be ambiguous: "one not

made of Sheetrock and timber, but code and polygons" (Ibid.). The deliberate rhetorical slippage

between the real-life house in Portland and the Greenbriar house in *Gone Home* unifies the

chronotope of the house, making it signify in real and virtual worlds; in the thematic space of the

game-world and, like Bakhtin's notion of the chronotope expanding out to the audience, capturing

also something of the surrounding culture and the romantic mythology of the indie scene. Once

again, the game text as breaking out narrative can be understood as a crucial vector for establishing

the studio's domestic self-identity, and in turn this sense of identity (the homely feel the game is imbued with) seems to pull from its domestic production context.

There is a particularly evocative image of the core creatives hanging out on the porch, an architectural space that has particular connotations of carefree homeliness in America. The porch is a version of the trope of the 'threshold' which is one of Bakhtin's most prized chronotopes and becomes symbolic of a "crisis and break in a life" (1982a, p. 248). This picture is symbolically charged with the excitement of new beginnings the indie scene is thought to embody. It's also an article that embodies some of the myths or trade stories of the games industry explored earlier, namely the myth of fun: "Tonight, they'll hang out around the fire pit, drink beers and head over to the swing set at the nearby park" (Mahardy, 2013). An idealised situation characterised of "artistic liberty and self-management of a small game studio" (Ibid.) that is quickly and predictably contrasted starkly with the impersonal factory setting of the commercial industry, maintaining the AAA/indie dichotomy essential for the maintenance of the romantic imaginary surrounding such indie developments. The whole piece is characterised as a 'leap of faith' with 'no guarantee of success' but is paradoxically so serendipitously narrated that it instead seems like destiny playing out, a misleading take on how easy it is to set up an indie studio, which draws on both the alea and agon version of the breaking in trade story explored in chapter 2.

Chronotopes provide structures that allow for certain types of interactions, narratives and subjectivities to form. With the home as an increasingly important site in the gig-based work of game design, and its increasing reliance on freelancing and outsourcing (Keogh, 2019b; O`Donnell, 2014), the function of the home studio here presents an alternative approach to the domestic space, one that bleeds the work of domesticity into the game, rather than just relocating the pressures of gamework into the private sphere. Not since Bakhtin observed how the role of the study emerged historically as a chronotope in literature has the home been such an important consideration. For

Bakhtin, the study as a space reconfigured home life around it, internalising or reflecting a growing

bureaucratisation of society and creating a new domestic space as a protective boundary from the

public sphere, which became instrumental in forming the newly minted private subjectivity of the

emergent bourgeois subject (1982a, p. 143). For Bakhtin the long emergence of the modern novel,

beginning in the Hellenistic era, is as a result of the increasing tension between a historically public

orientation and an emerging private sphere on which early capitalism and the bourgeois private

subject was predicated (Bakhtin, 1982c, p. 123). Before this, "an individual's unity and his self-

consciousness were exclusively public. Man was completely on the surface, in the most literal sense

of the word" (Ibid., p. 133).

Although there is still a tendency for us to culturally separate the home and the work place, and

indeed to gender the two as female and male respectively, as per this long cultural legacy, the

home-office becomes an important site for understanding the cultural shifts that are blurring the

domains of work and leisure in post-Fordist regimes of capitalism, in which "a process of

casualization of work, where production is moved from the traditional workplace to other social

spaces (Terranova: 2000), leading to an economisation of daily life (Guevara-Villalobos, 2011, p. 3).

For Bakhtin, the novel as the artistic mode most associated with the present due to its complex

polyglossia that constituted "a certain semantic openendedness, a living contact with unfinished, still

evolving contemporary reality" (1982d, p. 7), it was the ideal means of culturally working through

the difficult problem of handling private content in a public form; just so the videogame may be the

medium through which our current crisis of work and its shifting relation to subjectivity is being

worked through in wider culture (and particularly as they are played and made most by millennials,

the generation most effected by the neoliberal gig economy). This is especially true given how I have

argued the industry and its processes themselves sit at the bleeding edge of post-Fordist

reorientations of the work/life balance.

Waller's own investigation into the experimental electronica of Daphne Oram and her Oramics machine, a peculiar hybrid of analogue technology and electronics, shows how the intimate, emotional space of the home is core to her attempt to humanise electronic music, allowing him to conclude that the "there is little pre-cultural about the home" (2015, p. 171). Just so in the case of Fullbright, we see the home not only reconfigured as a site of experimentation and creative endeavour, but its affective dimensions bought into dialogue with the tendencies of the industry at large to enact a critique of the dehumanising qualities of gamework (Kerr, 2010; O`Donnell, 2014). The creativity commerce dialectic of the industry is here dramatically brought into focus by the (re)embedding of creativity into the domestic space – a space that stands centre stage not only in the virtual space of the game, but in the physical site of its instantiation.

Even here in this space of radical revision, however, there are echoes of Gaynor's previous life as a AAA designer. Not only does the ability to successfully subvert FPS aesthetics require an intimate knowledge of them, but there are some elements that directly recall design elements from *Bioshock*. For example, some of the more important textual artefacts the player discovers such as letters or diary pages, are narrated directly to Kaitlin by Sam in a non-diegetic voice over leverages the emotive power of the disembodied human voice, much theorised in radio studies (Chignell, 2009), to powerful effect. *Bioshock* is a game that popularised the now notorious storytelling device of audio logs – devices scattered across the game space that, often inexplicitly, contain the most intimate thoughts of the game's roster of characters. Indeed, this device forms the heart of Irrational founder Ken Levine's influential industry theory of 'pull narratives'; those environmental stories that the player extract from the game via their own exploration and agency rather than 'push narratives' that are forced upon a passive player via cut-scenes and other overly expositional formats (Levine, 2008). They are arguably put to a more intimate use here, taking the form of what Daniel Reynolds (2014) in an article on Gone Home for *Film Quarterly* calls analogue epistolary artefacts, that in the realist novels of the Victorian era were so frequently used to mediate the experience of an often unseen

woman. Here such letters and other documents are remediated and rendered in beautifully high

resolution digital textures by the game's engine, often directly addressing the player/character, they

paradoxically place the absent woman at the heart of the player's experience of the game. It

demonstrates the extent to which key works in this genre are overtly concerned not only with strong

female characters, but with problematising, deconstructing and queering gendered identities,

including that of the player.

In the trailblazing collection *Queer Game Studies* the editors Bonnie Ruberg and Adrienne Shaw

comment upon the timeliness of the project that brings together queer studies and game studies to

support a growing LGBQT+ audience for videogames (2017b, p. xix). More than simply a concern

with representation of diverse characters in games, Ruberg and Shaw stress how the deconstructive

character of queer theory (understood as a process of defamiliarizing the normative) has the power

to diffuse dichotomies that have developed around games culture and scholarship, and explicitly

allude to the ludology/narratology debate (Ibid., p. ix), which as I discussed in the introduction has

contributed to the artificial division between core and shell, as well as representational issues from

simulational ones (Anable, 2018). The subversion of mechanical expectations around the trappings

of the first-person shooter can be seen as a movement beyond the simple politics of representation

towards such a deliberate queering of the game's structures themselves, and through the centrality

of the home in both the game space and the context of its production, effectively domesticates the

FPS and its player.

NEW FOR OLD: THE REMEDIATION OF ANALOGUE MEDIA IN FIREWATCH

Firewatch is no less emotionally directed than *Gone Home*, though it draws its spatial intimacy from

a reconnection with nature rather than a return to the home. In it the player takes the role of Henry,

a middle-aged man who has taken a lonely summer job watching for fires in the isolation of a

Wyoming national park in a bid to escape his troubled life. Just as the setting of *Gone Home* was

tightly bound with an autobiographical return home to Portland for the developers, *Firewatch*'s

setting evokes the childhood memories of Sean Vanaman and Nels Anderson's home state,

indicating a strong aspect of the emotional resonance of walking simulators is their potent

reconstruction of a highly evocative time and place – indeed reviews of *Gone Home* abound with the

accounts of the developer's reconstruction of early 90s counterculture including Riot Grrrl and zines

(Riendeau, 2013). This movement to the great outdoors is also an evocative breaking out narrative

for the studio as they take up their position in the periphery of the industry. In this sense *Firewatch*,

like *Gone Home*, can be read as a mythological return to an authentic and idyllic form of life in

contrast to the AAA industry the designers so recently left.

Vanaman and several of his collaborators, such as Jake Rodkin and Chris Remo all of whom also

collaborate on the podcast network *Idle Thumbs* ("Idle Thumbs," 2004), had formerly worked at

Telltale Games on the immensely popular *The Walking Dead* (2012) series. Whilst not strictly

speaking a AAA enterprise, Telltale games presents an interesting case study of a studio that,

following its massive overnight success with *The Walking Dead* (which was no doubt aided by the

explosion in popularity of Robert Kirkman's comic book as a transmedia franchise) caused its

management to flirt with developing a more mainstream profile, growing rapidly in size, and far in

excess of its means as it later became apparent, whilst taking on multiple popular and expensive

licenced properties simultaneously. This gung-ho approach ultimately lead to their dramatic and

scandalous collapse, where over 100 workers were suddenly fired without severance, an event

widely reported on (Makar, 2018) and which became an inciting incident around discussions of the

urgency for unionisation. Vanaman and co wouldn't have known the studio's ultimate trajectory at

the point when they left, but they no doubt perceived the direction the wind was blowing and it's

hard not to read a tragic irony in the events prompting Henry's exile into the wilderness. Much like

the indie microstudio that still finds itself bound to the games industry as a whole, Henry is not quite

as alone as he wishes since he must communicate regularly with his distant overseer Delilah over

walkie talkie, and she constantly attempts to draw him into conversation about his past. Just so,

Campo Santo as still inextricably bound up in the cultural and industrial networks of the larger

industry, a fact that became apparent when, despite the modest success of *Firewatch*, the studio

were recently bought up by Valve (Alexander, 2018) the developers of Steam, the digital platform on

which indie studios depend, as an internal production studio.

One thing is certain, Vanaman is keen to distance the work he does at Campo Santo from that of

Telltale: "We kind of had the mission at Telltale to make choice driven narrative games for the

masses and we didn't really give ourselves that direction on *Firewatch* or anything we make, so I

think we can just be more subtle" [SV14]. For Vanaman this subtlety is as much a product of

generational drift as it is material technological affordances like the rise of highly customisable

digital distribution platforms: "we're all older now" [SV9], he reflects after naming and rejecting as

uninteresting several AAA action games. Aging gamers are seeing their tastes and interests transition

from reflex-driven shooters to new thought-provoking media forms, demonstrating the presence of

"a really underserved market for more nuanced sophisticated storytelling" (Ibid.). Tying strongly into

notions of middle-brow taste cultures, such as those explored by Pierre Bourdieu in *Distinction*

(2010), figures like Gaynor and Vanaman are explicitly attempting to take the role of cultural

intermediaries in order to reconfigure games to capture this broader middle-class, educated

demographic (of which they are a part) in much the same way early cinema and theatre made

similar transitions in their early decades (for instance see Bloom, 2018 for the evolution of

commercial theatre in the early modern era). Understanding significant portions of the indie scene in

terms of these dramatic changes to audience composition indicates a much deeper shift in class

habitus and taste cultures in gaming than even Jesper Juul's notion of the casual revolution (2012)

captures.

Relevant in this context is that, like *Gone Home*, *Firewatch* revels in its high-brow literary qualities. The blog post revealing the team's 'secret project' immediately notes the connection to American flaneur Jack Kerouac (Fyfe, 2014), who once held a similar post, and, unsurprisingly, the activity Henry is hoping to undertake whilst cloistered in the forest is to write a novel. Even the part of the website promoting the game takes the form of a literary journal – *The Campo Santo Quarterly Review* – and the game's sole collectable is a series of fictional pulp novels scattered around the park by previous firewatchers, each with a cover designed by celebrated graphic designer Olly Moss (whose previous work included a series of classic videogames reimagined and remediated as Penguin book covers). Just as *Gone Home* languished in the minutia of 1990s cultural detritus, *Firewatch* (and one assumes its developers) is in love with analogue 'tech' from typewriters and novels that scatter the environment, to the walkie talkie and camera that Henry uses to interact with the diegesis. Indeed, these analogue devices embody the role of what Sherry Turkle defines as evocative objects: "objects as companions to our emotional lives or as provocations to thought… underscoring the inseparability of thought and feeling in our relationship to things" (2011, p. 5). Analogue tech unsurprisingly features prevalently in both games, arguably reinforcing the sense of intimacy that comes from real human connections that both games ultimately pine for (for Kate in Gone Home this is an attempt to find the absent sister, and for Henry it is an attempt to reach Delilah in the closing act). Whilst both stories are meditations on the lack of such connectedness, characterisations of their conditions of production conversely celebrate this sense of togetherness by emphasising the notion of the indie team as familial unit in counter-pint to the huge, impersonal teams of AAA development.

Firewatch goes further with its use of analogue tech, actually building several forms of it into the game's core mechanics. Just as *Gone Home* recontextualises and demilitarises the FPS through the intimacy of the domestic setting, I argue that these analogue devices enact a similar breakdown of militarised player interactions in *Firewatch*, through a rejection of the high-tech approaches of AAA

videogames and an affective reconnection with the past. Like Turkle's evocative objects they draw attention to themselves as a means of prompting critical thought and introspection, but also mediate the affective dimension of the story. Significantly, in light of the literary qualities noted in such games, *Firewatch* even begins in the style of a text adventure game, written in the interactive fiction software *Twine* (Chris Klimas, 2009) by writer Sean Vanaman to fill the player in on the back story and motivations of Henry whilst forcing the player to utilise their imagination (a kind of warm up exercise, since it is the player's empathetic and interpretive skills that will be drawn on throughout the game, rather than twitch reflexes). Twine is an open source and highly accessible programme for writing interactive fiction and is one of the tools most often associated with the democratisation of game design, allowing a wide range of new creators to enter the fringes of the industry and to express themselves through it (Bernardi, 2013; Harvey, 2014). Vanaman tells me that his technique for exploring and developing characters was to create short Twine games that the rest of the team could play through: "I just write little games where you play as this character, and then it's like you learn who they are and what they feel like through playing as them for fifteen or twenty minutes" [SV20]. The games story was planned from the beginning using interactive tools, allowing for a more organic blending of game and story than more traditional approaches to scriptwriting might. This opening, then is paradoxically both deliberately low fi in its aesthetic, eschewing the realism the games industry tends to aspire to, but simultaneously progressive in its approach to what Janet Murray calls 'procedural authorship', a form of authorship suited to games as an interactive medium which involves "writing the rules by which the texts appear as well as writing the texts themselves… the procedural author creates not just a set of scenes but a world of narrative possibilities" (1997, p. 152). By deliberately exposing the creative process in the opening moments, *Firewatch* asserts a radical statement of a craft aesthetic, which some have seen to be at the heart of progressive uses of videogames (Westecott, 2013), and clearly aligns the game to the ethos of personal expression that Twine as a tool has come to represent.

The game's story primarily plays out as a series of conversation over walkie-talkie with Henry's boss Delilah, herself trapped in a watchtower just visible on the horizon, and cleverly evoking the fairy tale of Rapunzel that will be thoroughly subverted at the end. When the player finally makes it to her watchtower in the closing moments, the forest an inferno around them, Delilah has already escaped via helicopter and there is no one to let down their hair. In a clever reading of the game in which she argues that hegemonic versions of masculinity are disrupted, Kagen has observed how highly normative gamers like the notorious PewDiePie have been so overtly offended by the game's conclusion and its lack of generic resolution (2018). As Emily Short astutely observed of the ending, representing one of many instances of industry theorising in which research participants conducted critical analysis of other games, "you don't get some sort of big romantic ending with her and you don't get some kind of heroic, 'Oh I saved the day' kind of experience because it's not that kind of story, it's about something else" [ES35]. That something else is about the disempowerment of the player, a theme shared by many other games in this study including *Alien: Isolation* and *République*, analysed above. Shira Chess has provocatively described such narratives of empowerment and closure, represented by traditional AAA game narratives that these games reject, phallocentric structures: "traditional narrative theory [that rely] on masculine, heteronormative conceptualizations of a necessarily reproductive climax" (2016, p. 84). Rather than see such a radically open ending as a critique of their tendency to expect the world to centre around them as empowered agents, players like PewDiePie maintain their normative subjectivities intact by instead viewing the ending as a failure of storytelling. According to Kagen, Henry tries and fails to enact stereotypically manly traits throughout the game, just as he failed to care for his wife in the game's backstory and just as he fails to couple with Delilah in the game's finale. Kagen successfully argues that these failures are a source of emasculation for both Henry and the (normative) player filling his shoes; reimagining Henry as the site for developing new forms of masculinity around care of the self and the other, utilising social engagement (including sustained conversation) rather than violent

interaction. Indeed, the game is impossible to 'win' by conventional standards making it an example of the kind of tragic games Juul searches for in *The Art of Failure* (2013).

It's easy to dismiss the conversation system of *Firewatch* as simple on first blush but, unlike Vanaman's previous game *The Walking Dead*, the game utilises a dynamic database driven approach to narrative rather than a simple branching path structure. *Firewatch*'s narrative is built on a series of interlocking systems. Firstly, there is what Vanaman describes as the 'global blackboard' which keeps track of all the choices the player makes, the things they have found and the things they reveal to Delilah, which Vanaman describes as, "a giant list of what's true... hundreds and hundreds of items long" [SV16]. Just as in platform studies the material and technological affordances of the game system impose limits on the kinds of creativity (and writing) that can be exercised by developer. Indeed, the way the systems were built at this particular studio, and the specific types of tools employed, had a significant effect on the creative constraints and affordance placed on Vanaman as a writer:

> We did something that I think was really smart and I think was really stupid, which was we didn't build a visual editor for our event editor. We just built this spreadsheet system for giving things truth points. What that did is forced us to keep everything really dynamic and systems driven. [SV18]

The lack of a specific tool, a visual editor, resulted in a tangible change to the creative practice, a productive limitation. Whilst visual editors, like Twine, structurally favour branching path narratives that link one narrative node causally to another, this method of working led to a more radical take on procedural authorship based on the more dynamic, non-linear, non-hierarchical, rhizomatic system of the database, which Lev Manovich (2002) and Hiroki Azuma (2009) have defined as the

dominant structuring logic of postmodern culture, and thus an ideal solution to creating a truly dynamic narrative fitting to the structure and affordances of games.

Whilst the global blackboard tracks the dynamic plot points that emerge from player choice, an event system has been programmed to initiate dialogue that is deemed most appropriate to the player's current status, by constantly taking into account both their geographical location in the world and how far they are into the overarching story – a structure of time and space like the chronotopes explored above. Indeed, whilst the deployment of the chronotope of the domestic space in *Gone Home* cleaves relatively true to Bakhtin's original concept, here the logic of the chronotope itself is utterly reconfigured within the crucible of games as a procedural medium. Through fragmenting the narrative elements in the database and displaying them algorithmically, it is the game system and not the author that is in charge of combining spatial and temporal information to craft the way the chronotope is presented at a given moment, and this will likely vary considerably from player to player. As Vanaman says:

> I mean I don't know where the hell you were in the world when you had that certain
> conversation, because most of the conversations in the game just happen when they
> happen. They, like, make sure they're allowed to happen and go "hey let's do this." They're
> not geo-tied, pretty much. [SV31]

However, it is pertinent to point out that despite the huge configurability of narrative options within the narrative space, productive limits have been set by the overall shape of the story visualised and programmed by Vanaman along with the rest of the team and is equally bounded by the limitations of the systems that reproduce it. *Firewatch* is as unlikely to turn into a monster movie or a nature documentary (though at times there are elements of both) as the studio that produced it are likely to simultaneously combust, or to throw in the towel and turn Campo Santo into a burger joint, or to

collectively decide to become Hell's Angels. Stories (and videogame stories are no exception), like

lives, are shaped by a progressive series of choices that result in an internal consistency unless

absurdity is the aim (which is its own kind of anti-coherence). For instance, employing the concept of

semiotics as "the study of order building or path building" Madeline Akrich and Bruno Latour explore

"how a privileged trajectory is built, out of an indefinite number of possibilities" (1992, p. 259), the

key being that there are not infinite possibilities. A studio is a specific site for turning inputs into

outputs through a delimited range of experimentation defined by the systems (technogram) and

people (sociogram) within its walls (Farías, 2015).

For instance, whilst it's true that the potential amount of dialogue variations are impressive, the

game is still limited by the amount of dialogue lines that have been handwritten by Vanaman,

corresponding to what Murray calls 'primitives' or the basic building blocks of the story: "the actions

of the interactors themselves, as structured by the author" (1997, p. 190). Indeed, as the over-

arching narrative progresses Vanaman tells me that certain humorous responses are considered

tonally inconsistent with the mounting drama and are filtered out, resulting in a more limited range

of options as the game heads towards the same conclusion every player will face – a deliberately

fatalistic narrowing of the possibility space that expresses the player's disempowerment in the

narrative structure. Unlike idealised systems of natural language processing – the idea that AI

routines can create intelligible and contextually appropriate dialogue as richly as a human could –

which was a dream of early game studies (for an example see the discussion of *Façade* in Mateas,

2004), the content that the system is drawing on here is a hybrid created via a collaboration

between a human (Vanaman) and non-human actors (the global blackboard that holds the data,

trigger volumes that evoke it, and listeners that deem it appropriate to play). The strength of the

system might be seen to lie in the combination of human intelligence creating the content, whilst

leaving the computer system to arrange and reconfigure it. This seems to fall in line with Aarseth's

notion of cyborg literature, which has "less clear cut boundaries between human and machine"

(1997, p. 134), but also Janet Murray's notion of procedural authorship thus satisfying the demands of both ludology and narratology, even synthesising the two in a relationship between human and machine that I see as a form of the kind of collaborative poetics explored above.

In building her argument Kagen notes the subversive use of genre expectations, that thwarts the player's expectations of being the hero. When Henry is followed by a mysterious figure and discovers government listening posts, he believes himself to be at the heart of a conspiracy of the kind that can be found in the majority of videogame plots. Indeed, the conspiracy can be understood as a chronotope that posits the player/protagonist at the privileged heart of the narrative, in an inversion of the function of dramatic irony they seemingly know more than all other characters. The discovery of the corpse of a child in a mine shaft drives Henry's self-centred imaginings to a breaking point and sets him on an obsessive path to ruin like Gene Hackman's wiretapper hero of *The Conversation* (Coppola, 1974). It transpires that the body is that of a geeky child called Brian, fatally ill equipped to the great outdoors but pushed beyond his limits by his macho father Ned whose shame and grief over his son's death, in an analogous fashion to Henry, drove him to become a hermit in the woods.

The game utilises the affective impact of the encounter with the dead child, the symbolic and ludic pivot point of the game's narrative, to align the player with Henry's outlook through a brilliant piece of design that enforces a link between Henry's emotions and the player's field of view. In the narrow confines of the mine shaft the player must step over the child's corpse using the same button that usually sees Henry heroically mantling over rocks and fallen tree trunks in the forest, the slow pan of the camera downwards lingering on the horrific scene and creating more emotional impact than a hundred deaths from falling in any other game. The application of this taken-for-granted mechanic, that players have been using to successfully traverse the environment for hours, to this profound new use is deeply unsettling, causing a radically disruptive reframing of Henry's athletic engagement

with the world solely through mechanical means. It is impossible to look away, not just because the scene is so powerfully orchestrated (it is one of the only moments the camera is taken from the player's control), but because the player needs to see the screen in order to execute the on-screen button prompt. The game forces you to look, and in order to progress Brian's body becomes a ludic and narrative obstacle that must be overcome, every bit as emotionally difficult as a boss fight in another game might be agonistically difficult. Brian's death is the antithesis of the expectations around videogame protagonists, able to traverse hostile environments with ease and simply resurrecting to try again when they fail. Rather his tragic, broken body, Kagen (2018) suggests, acts as terrifying memento mori that outside the world of games death is real and the player vulnerable; a traumatic reconnection to the real. It is also a wonderful moment of ludonarrative convergence, in which the game's mechanics bear the weight of telling the story.

Part of the process of moving away from the AAA to the indie scene, and particularly towards the minimalist aesthetic of the walking simulator, is a removal of all extraneous interface elements. In this way the codes of realism that these games evoke through their highly personalised recreation of real environments and historical memorabilia are facilitated through a simple, uncluttered screen that looks out onto the world in a seemingly transparent and unmediated way that stylistically evokes the aesthetics of film or TV only further enhanced by the lack of editing that mark those media. Games, outside of cutscenes at least, typically run without the interruptions of edits (which would be highly disorientating to players) though some more experimental indie titles like *50 Flights of Loving* (Blendo Games, 2012) have started experimenting with filmic techniques like smash cuts in earnest. *Firewatch* is not quite without cuts, in fact, though these are structured like the breaks between chapters in a novel (another literary metaphor and an aspect of remediation). Following a long fade to black the next scene is arranged by invisible set dressers and the player is often moved forward in time or to a different locale. The effect introduces some productive uncertainty into the proceedings in the form of an ellipsis; a gap in which we don't know what we/Henry have been up

to, a process that is highly atypical of games and effectively creates a suspicion between player and avatar that breaks down the normal process of identification as a merging of player and avatar. This is especially potent given that Henry is supposedly investigating the disappearance of two young girls (last seen when he shouted at them for skinny dipping). Suddenly the ellipsis comes to seem far less like a stylistic trope, and more like blackouts masking possible psychotic episodes and rendering Henry himself suspect. As Chris Donlan points out in a characteristically insightful reading of the game "Firewatching is Henry's job... Your job is watching Henry. Your job is wriggling your way into his life and speculating about the things that happen around him" (2016). Just as Henry is suspicious of the events occurring around him, we become suspicious of Henry at a meta-level of the story, and thus the internal logics of a conspiracy theory are enacted through the very act of play itself. In my analysis of *Tomb Raider* I demonstrated how in a big budget game with multiple competing understandings from the numerous actors involved there can be a dramatic division between how a writer might understand the player's intended relation to the character compared to a producer, a play tester or a PR department, but here in *Firewatch*, one of the most successful instantiations of the unreliable narrator effects in videogames, it would seem utterly intentional that we are supposed to increasingly come to understand ourselves as Henry's chaperone rather than his being our reliable surrogate in the world.

Conspiracy theories are so attractive, particularly to videogame designers, because they centre the protagonist making them the privileged site of a truer or deeper knowledge out of reach to all others, and has been interpreted by some theorists as a kind of hermeneutic practice (Fenster, 2008, p. 95). Just like the denouement of *Gone Home*, the truth of *Firewatch* is not only more mundane than fiction but more devastating. So in the latter stages of the game, when the reality of the situation is finally revealed (the government listening posts are merely for environmental observation; Henry isn't being pursued by a shadowy organisation but by an emasculated father who is an even bigger failure than he is; the missing girls weren't murdered after all) the certainty of

Henry's worldview, which placed both he and the player vicariously with him at the centre of the experience, comes crashing down, and so too does the player's own privileged position at the centre of the experience as co-conspirator.

Alexander Galloway has claimed all games to primarily revolve around actions that the player can take in the world, which he divides into machine actions and operator actions depending on is they are submitted by the computer or the player (2006, p. 5). It follows that different games enact different terms of ontological engagement via different types of action, with Galloway asserting that the "a subjective camera perspective, coupled with a weapon in the foreground" give us the "kernel image" (2006, p. 57) of the FPS and a constant reminder its chief operator action of shooting. In the analysis above, I claimed *Gone Home* subverted this kernel image by maintaining the first-person perspective of the genre but disarming the player by removing the gun. Firewatch subverts this kernel image differently, by exchanging the gun with a walkie-talkie it restructures the player's prime means of interacting with the world as an operator through conversation rather than firepower. By placing communication and exploration above conflict and athleticism the game falls in line with calls from industry theorists like Sheri Graner-Ray (2004) and scholarly theorists like the Ludica Collective (2008) to approach game design in more androgenous terms, using forms to appeal to female players who are thought to prize narrative, exploration and indirect forms of combat explored in the introduction. Thus Firewatch is able to construct such an androgenous narrative experience divested from traditional agonistic mechanics or complexity of interaction.

The walkie-talkie, wielded by Henry in place of a gun, but often rendered on screen in as much detail, is a potent symbol for this game's unconventional structure. Whilst many games use such devices to feed players mission details, so as to avoid breaking their immersive engagement, few foreground them in as much detail as *Firewatch* does. James Benson, who worked on animations in the game and is therefore likely responsible for the dramatic tension I observed in the scene with

the child's corpse, has playfully commented: "*Firewatch* is basically *Doom* except the monsters are things to talk to Delilah about" (Benson quoted in Fyfe, 2015b), which leads Kagen to conclude: "in other words, Firewatch explicitly repurposes the visual language of a First Person Shooter in order to produce a 'talking simulator'" (2018). The presence of the walkie-talkie increases the link to the FPS genre beyond the shared perspective since the material and experiential nature of its manipulation is highly, and I would say deliberately, reminiscent of shooting in most games. Mechanically the game utilises the controller's 'trigger' buttons, which, if we recall from the earlier discussion of the genre, evolved alongside the evolution of the FPS genre to enact the mimetic metaphor of the gun; the left/right squeeze making the clear connection to a shooter in the mind of the player with any experience in that genre. Indeed, this was something noted by some reviewers – note here the language Donlan uses to describe his actions replete with references to firearms: "a bumper allows you to select basic responses while a timer ticks down, then a squeeze and release of the trigger locks you in, and passes agency from you to Henry, who fills in the blanks" (Donlan, 2016).

For Keogh, drawing on feminist critiques of technology that stress the embodied and situated nature of interaction (Haraway, 1991; Wajcman, 2004) explains how the learned competencies of playing videogames, that accompany the developing complexity of videogame controllers, are necessarily gendered: "A videogame demands a competency before it reveals its qualities, but that competency is itself not apolitical… who possesses the embodied literacies most videogames require has been historically demarcated along gendered lines" (2018a, pp. 77–78). What is often passed as neutral and natural by experienced gamers, like Roland Barthes' (2009a) notion of ideology as historically contingent exercises of power masquerading as nature, is never-the-less coded as male, making the controller an important site for the critique and reconfiguration of gaming norms, a case I have also made elsewhere (Bowman, 2020). It is important to note that even though they may offer a far more stripped down form of interaction in game, walking sims still depend upon traditional controllers with their glut of buttons, a constant reminder that the artefact is designed for more than it is being

used – the 'lack' associated with the walking simulator by some gamers is inscribed into the very interface itself and the player is always acutely aware they are not fully participating in the medium.

But in spite of its simplicity, the controller in *Firewatch* refuses to retreat into the background as an example of Bolter and Grusin's conception of remediation as immediacy, but rather is foregrounded through a process of hypermediacy. Rather than simply allowing players to communicate via the press of a button, the norm for dialogue systems like those found in RPGs or adventure games, the developers use a far more mechanically complex and thus deliberately engaging means of interaction that helps turn the walkie-talkie into an evocative object. Through an unexpected complexity and a jarring mimetic link between the walkie-talkie and the gun, the game works to render the controller visible once more, and by so doing rejects simplistic notions of immersion and their problematic notions of transparency and disembodiment that critics like Marie-Laure Ryan have noted, in which the desire to erase the physically embodied act of play forces the adoption of a passive and uncritical mode of engagement (Ryan, 2003, pp. 10–11). The act of transposing the activity of shooting a gun onto the much more everyday activity of talking to another human being is another form of the process of domestication noted in *Gone Home*. And like *Gone Home*, in some ways its predecessor, *Firewatch* uses the conventions of masculine drama – the conspiracy theory and the gun – to create a sense of creeping dread, only to upend them with a conclusion that denies retroactively the hypermasculine justification of violence.

CONCLUSION

In their essay 'Towards a New Gendered Politics of Digital Space' (2008) Tracey Fullerton et al. argue the need to for an androgynous game space "that engages all aspects of all persons" (2008, p. 1), and where women and other marginalised folks can be themselves without having to conform to the expectations of male roles, stripped of the masculinist impulses towards competition, domination,

conflict and destruction that games are typically shaped around. By decentring and subverting the historically privileged traditional model of the gamer, the genre thus opens up a space for and radically supports newly emergent player constructions, thus creating such a temporo-spatial configuration. Bakhtin's notion of the chronotope is a vital tool for opening up such settings in order to appreciate how such structures function as engines of culture both within and without the game text.

Bakhtin uses the terms centrifugal and centripetal to denote the two forces at play in language constantly seeking to explode its potential meanings or close them down (1982a, p. 272). The traditional gamer identity evoked through this thesis, although partial, provisional and in no way representing the entire audience of games, can be understood as such a centripetal force since it seeks to act as a conservative rallying point for homogeneity in the face of diverse new cultures of play. In a medium that appears to be undergoing a period of unprecedented expansion and heterogeneity the radical reconfiguring of space in the walking simulator points to a new disruptive gamic form that helps undercut this orthodoxy through enacting a deliberate centripetal closing down of spatial affordances and player verbs; by so doing it paradoxically enacts a centrifugal opening up of games culture through an increase in accessibility (of theme and interface).

The analysis above has demonstrated precisely how these two prominent and influential works in the genre undertake this process through an application of Bakhtin's notion of the chronotope on both the text and its mode of production. In the context of games this term can be extended further to include not only a fusion of spatial and temporal elements into a single gameplay-image, but also to incorporate the *actions* of the player as a space of simulation. Crucially the chronotope allows for the formation and exploration of new subjectivities as they are formed in conjunction with and through cultural works, becoming a valuable concept for understanding the shifting concept of player subjectivity and a means to analyse these transitions at work in individual texts. Whilst many

have observed how the traditional gamer has evolved in the masculine, competitive play spaces of

traditional videogames culture such as the arcade (Kline et al., 2003; Kocurek, 2015), I have deployed

this evocative concept to discuss the domestic structure of *Gone Home* as a subversive space for

working through an alternative to the hegemonic model of play as unfolding in a agonistic space of

violence and struggle. Instead, *Gone Home* enacts a kind of queering (Ruberg and Shaw, 2017b) of

heteronormative understandings of dominant virtual topographies through its reversal of emphasis

from exterior settings of domination, to the intimacy of the domestic space which enacts a new

player subjectivity based on interiority (both in a literal and a metaphysical sense).

In an industry already rocked by crises of representation, where the lack of diversity in development

teams jars (Weststar et al., 2016) with an extensive diversification of audiences (Anthropy, 2012;

Chess, 2017; Juul, 2012; Ruberg and Shaw, 2017b; Shaw, 2015), such struggle is inevitably expressed

in its textual products. My analysis of the walking simulator genre aptly illustrates these tensions

being played out in a newly emergent genre that significantly subverts key characteristics of

dominant videogame paradigms, particularly the violent competitiveness of agonistic play. The

genre is thus a focal point of the growing epistemological and ontological debates over what should

constitute a 'game' (and by extension who gets to play them). Identity formation is inextricably

linked to our cultural products, because, as Katherine Hayles reminds us in her seminal study of how

digital paradigms have come to transform our ideological worldviews: "'what we make' and 'what

(we think) we are' coevolve together" (2005, p. 243). To appropriate the rhetoric of their opponents,

and following the lead of Kagen, walking simulators should be thought of as a kind of anti-game in

this context: less interested in finding a place within the currently existing commercial and critical

orthodoxy than subverting it from within.

Gone Home and *Firewatch* represent some of the most critically and commercially successful of

those radically independent visions and also represent the most intensively narrative, even literary,

focused examples of game design in recent years. And yet, these developers still defend the identity

of these works as games because they employ procedurality and emergence in specific ways to

create meaning (Murray, 1997). Both case studies clearly utilise the spatial and interactive

affordances of the medium to construct their stories. In short, something significant would be lost if

these narratives were translated into more linear form; they are dependent upon the specificity of

games as a medium to function – and are therefore undoubtedly games. As much as their opponents

try, walking simulators cannot be easily or crudely separated from videogame culture, and yet they

clearly have a subversive relationship to it, making them true exemplars of Raymond Williams'

notion of emergent structures that can challenge the dominant ideological centre (2003).

And walking simulators are having a discernible thematic and mechanical influence on the medium

at large, including the AAA sector and the developers that make it up, reinforcing the notion that the

indie sector has started to function like the R&D department for the games industry at large, a place

where risk can be offloaded and new ideas can be forged outside of the iterative self-reinforcing

cycles of the core industry spiral. In a provocative article for Eurogamer entitled 'Walking is the New

Shooting', veteran journalist Jeffrey Matulef (2014b) not only recognises Gone Home's deliberate

subversion of the FPS through this process of domestication, but sees its potential for realigning

audiences around a new interest in narrative throughout the industry. He convincingly argues that

elements from the walking simulator are seeping into commercial game design, using *Alien: Isolation*

(Creative Assembly, 2014) as an example of a game that shares much in common with a walking

simulator albeit one written on much larger canvas, since it is far more concerned with telling a story

through the slow exploration of an evocative space than the typical focus of such games on combat.

Indeed this connection is evident from creatives like Catherine Woolley and Gary Napper facing

down questions posited by players about why they were prevented from using guns throughout the

game and why they were only given the flamethrower, the only certain way to escape the alien, in

the game's final act: "If we gave the player the flamethrower at the start of the game it would be a

completely different experience" [CW49]. Indeed, *Alien: Isolation* also attempts to disarm and

disempower the player every bit as much as *Gone Home* and *Firewatch*, only by giving them a gun

but strongly discouraging its use (because you will instantly give away your position to the alien), a

radical move in a AAA action videogame.

In the article Matulef also echoes Vanaman and Gaynor in discussing how such games are expanding

the audience of gaming, seeing this as evidence of the growing narrative sophistication and

experimentation of the medium. I have argued here how this reflects a wider cultural shift away

from the action oriented games that have defined videogames for much of its life cycle, towards a

more contemplative form defined by exploration, which has been pushed to the fore by the indie

movement, and in particular the walking simulator explored here.

In suggesting that AAA videogames are learning from their indie cousins, Matulef is potentially

evoking the argument explored in the previous chapter about AAA processes appropriating

innovative ideas from the indie scene, which for all intents and purposes functions as its de facto

R&D department. However, as I argued in that chapter and Matulef suggests in his article, this

should not be seen in purely negative terms using the language of appropriation, but in the sense

that such exchanges are enacting positive change and innovation in the bigger players of the

industry. The radical potential of this exchange of ideas between dominant centre and emergent

periphery is evident, in many of the examples given in this study, but is particularly visible in the

relationship between *Bioshock*, *Gone Home* and *Alien: Isolation*. Steve Gaynor leaves AAA developer

Irrational games where he worked on *Bioshock*, transitioning to the indie sector production, and

frames Gone Home as an explicit desire to critically engage with and subvert the dominant FPS

models he once participated in creating by removing the RPG and shooter elements from Bioshock

making it "the core gameplay – Instead of a side element" [SG3]. Meanwhile, in the other direction,

at Creative Assembly developers like Dion Lay and Catherine Woolley are influenced by Gone Home

and other indie games to do something radically different with their design. This is not a speculative

relation, but one backed up both by interview evidence as well as observed by journalists like

Matulef.

This all demonstrates that even if developers aren't actively breaking off from the AAA sector to

form their own indie studios in order to actively take part in such experiments, there are still plenty

of highly enthusiastic developers in the AAA sector who will be inspired by these activities on the

fringe and will attempt to incorporate them into their own practice. We only need to realise that the

AAA studio is not an homogenous blob, a black box of stultifying official processes, but just like the

indie studio is also a temporary arrangement of hundreds (and sometimes thousands) of individual

trajectories, each with their own interests, passions, skills and identities which cannot be so easily

bracketed off from the work at hand. If ANT has demonstrated that even the scientific community,

commonly seen as utterly dispassionate and objective in their pursuit of knowledge, are just as

prone to sociological conditions as the rest of us (Latour, 1993a, 1988; Latour and Woolgar, 1986),

then it is undoubtedly true of game developers who, as authors like Weststar (2015) and O'Donnell

(2014) have aptly shown, are so utterly enthusiastic and subjective in their identification with the

medium of games. In short, we remain blind to these important sociological factors so long as we

retain the increasingly unlikely myth that the game studio is a coherent and homogenous black box. I

have shown throughout this thesis that this is not the case and advocated a methodological

framework by which we can crack open the surface of the studio as unit in this rhizomatic network

and understand them as complex technosocial assemblages. To this end in this chapter I have not

only proposed an interpretation of certain games in the walking simulator genre as deeply

subversive commentaries on dominant videogame structures and paradigms of play, but crucially

these critiques are facilitated by the material arrangement of the actors in very different, and often

domestic networks. The conclusion will go on to explore the radical potential of this interchange

between AAA and indie using Michel Callon's notion of 'hybrid forums' essential to any functioning

democracy (Callon et al., 2009).

Conclusion: From Hegemonies of Play to Hybrid Forums

This thesis has concentrated on the kinds of stories that are told in the complex and shifting production contexts of game design, with a particular emphasis on the interactions within real material spaces of production utilising a mixed method of production culture media anthropology and semi-structured interviews (Caldwell, 2008b; Latour and Woolgar, 1986; O`Donnell, 2014). In particular I have attempted to make the game studio a unit of analysis within the complex flows of narrative intention and economic realities (Farías and Wilkie, 2015). This is an original enough intervention in itself given the lack of focus on the area of production in traditional game studies scholarship, but I have attempted to go further still by reframing the issue of narrative, moving away from a formalist framework as it has traditionally been considered within the context of the ludology/narratology debate, to one that is deeply embedded in those production contexts, and therefore shaped by the affordances and constraints those contexts impose upon it. Following recent work on transmedia storytelling in the contexts of television (Clarke, 2012) and anime (Allison, 2006) I have proposed a methodology that addresses the overlapping of concerns between textual artefact and their production context, showing how one reflects and refracts the other.

Fundamentally, I have demonstrated that changes to the production environment have resulted in changes to the kinds of stories that are being told, and that recursively these new approaches have lead to further changes to the production context. The core motor for such changing relations between text and context is undoubtedly the emergence of the indie scene, which has drastically accelerated any such cultural shifts by giving a highly exposed space to creative practitioners searching for new ways to reach new audiences away from the highly regulated and homogenous regimes of AAA production, but in turn has also drastically reshaped the larger industry that it is bound up with in complex networks of interdependence.

The whole argument can be dramatically reframed, however, in order to come at the issue from the perspective of the audience rather than production. Although such a perspective, and the exhaustive reception studies methodological apparatus it would demand, has been beyond the scope of the present thesis, the presence of new kinds of audiences for gaming has both motivated and been motivated by these shifts to the production contexts themselves and can be clearly linked to these new types of texts and processes. My interest has been not so much in looking at the reality of these new audiences, but how they are understood, constructed, framed, mobilised and reflected upon by practitioners as particular instances of industry theorising and as a means to justify, explain or motivate their own creative endeavours. This is in line with Shira Chess' (2017) important recent work, which demonstrates that a female audience is both real and constructed by the industry, and building on these observations I have attempted to show how developing audience demographics and shifting taste cultures provide a discursive construct that helps to produce actual material changes within actual production cultures. Just as Ien Ang (1991) characterises the TV industry in a post network environment as 'desperately seeking the audience' as it fragments and diversifies behind traditional categories and stable platforms, the games industry is similarly entering a period of flux and diversification that is driven by a complex reorientation towards new consumer groups and a newly heterogenous idea of audience(s).

Many theorists have observed that such narrative transformations have resulted in the questioning of many seemingly taken-for-granted certainties in video game design and consumption. I have discussed some of these works in this thesis including Shira Chess' (2017) study of female gamers, Jesper Juul's (2012) observations around a 'casual revolution' and Mia Consalvo and Christopher Paul's (2019) probing of shifting taste cultures and the practices of gatekeeping this is inspiring. Perhaps Paolo Ruffino (2018a) expresses the stakes to these shifts most strongly in his work *Future Gaming*, suggesting that this all boils down to an attempt to exercise control of the discourses of gaming and our ability as scholars to intervene to change the prevailing teleological narrative in

order to imagine a more open and diverse future. Such a project is increasingly possible and desirable now due to the continuing breakdown in categories of what constitutes both a game and gamer in the context of contemporary videogame play and practice.

This thesis has sought to contribute to this philosophical and (indeed) political project, not only by tracking real material changes in the industry but providing an intellectual space and a methodological frame for a further reimagining of these forces. One way of seeing this is as an application of Ruffino's more theoretical discussion of the struggle over narratives in *Future Gaming*, by exploring how these ideas play out in concrete spaces of game design responsible for forming narratives of varying kinds. This conclusion provides an overview of some of my key findings, and some of their repercussions, whilst pointing the way for such further research into the dimension of changing practices of consumption. But first it is necessary to address head on what has emerged as a core concern of the thesis arising from my grounded methodology: gender and social justice. Such issues rose to the fore in several of my case studies (*Tomb Raider*, *Gone Home*, *Republique*) as key thematic concerns and repeatedly emerged, implicitly or explicitly, from the semi-structured interviews I conducted or were already core concerns in pre-existing journalistic interviews circulating in the discourses of games industry fandom. The new audiences that have been consistently imagined and theorised by game developers – those seeking more freedom to tell different stories in the indie sector, as well as those in a AAA industry keen to court new demographic sectors – are made up to a large degree of new types of players (with different priorities, motivations and taste cultures) entering the increasingly complex assemblage of videogame consumption and production. As many theorists have observed (Chess, 2017; Juul, 2012) it is the female gamer that is the most substantive of these newly emerging identities.

Such new audiences have been extensively reflected on by my interviewees. For instance, Sean Vanaman, the writer of *Firewatch* reflects upon the maturing and broadening of the audience,

seeing indie production (and particularly his own studio) to be at the "forefront" of "hungry under-served audience[s]" [SV8]. Echoing Vanaman, *Gone Home*'s designer Steve Gaynor demonstrates a similar awareness of the divisions and tensions that have led to the emergence of new more discerning audience, seeing opportunity in this fragmentation of the market as a motivating factor for his own work:

> …there are new ways to get those games to audiences more easily and there's this generation of developers who… given the chance to make their own thing on their own terms and bring it to an audience themselves, they're going to take the game literacy they have and do things with it that we wouldn't normally see otherwise. [SG29]

Gaynor has attempted to capitalise and build on these experiments first undertaken within the constraints of a AAA studio, and its core genres, by moving his practice into the indie sector and stripping back the FPS genre to its fundamental storytelling potential. Although Gaynor and Vanaman's reading of these changes in the current audience formation might appear overtly optimistic or premature, walking simulators like *Gone Home* and *Firewatch* have undoubtedly continued to perform well both critically and commercially, despite the above-noted backlash against them within the established medium's fandom, thus indicating such audiences exist.

Ryan Payton's experience with some elements of the fandom online indicate the extent of the risk in producing a narrative that takes a strong moral stance or breaks fundamentally with established player-centric audience conventions and expectations. Reflecting on the ending of *République*, where Hope finally rejects the player's control, Payton says:

She's now reached this point in her life where she can make decisions, you don't have to be her caretaker anymore… Which was what our intent was. And I'm just really happy we followed through with it because it is a pretty gutsy idea. People online… like people were really upset with us about it. [RP39]

Furthermore, Payton is somewhat pessimistic about the future of games focused around storytelling, and particularly more linear stories like *République*. He suggests that such stories are now being pursued predominantly by creators in the indie sector, whilst AAA studios concentrate on more ludic genres organised around deeply mechanical systems and multiplayer modes (shooters, MOBAs, MMOs), which lend themselves well to highly repeatable experiences that can be monetised over a long period of time as a continuing service:

I spent most of my time last year actually pitching and negotiating contracts with various publishers for our next title, and the vast majority of the publishers I talked to were not interested in linear content or semi-linear content, they wanted daily engagement, they wanted dynamic experiences, they wanted experiences that would bring the most YouTube clips and Twitch streams and would keep the conversation going for not a few weeks, but months, if not years. So they can continue to monetize, continue to keep players engaged in that IP or in that universe. [RP54]

As Payton reflects such emerging demands in the commercial marketplace are and "tall order" (ibid) for traditional linear narratives with a clear beginning and an end to accommodate. Here then is perhaps the most important distinguishing characteristic of the indie sector vis a vis the AAA industry. It isn't to be found in a spurious craft aesthetic as Jesper Juul (2014) claims, or even in the authenticity of the independent spirit (Grabarczyk and Garda, 2016) but perhaps increasingly an approach to narrative that is becoming ever harder to maintain in AAA contexts. Although analysis of

the narratively sophisticated AAA games explored in the thesis might give us pause as to the absolute truth of such a statement, it is clear that from the perspective of industry theorising if not in reality itself, the indie and AAA sectors may be starting to separate along the lines of narratology and ludology respectively (though a more in depth and possibly quantitative study would be necessary to test this theory).

However, this thesis has consistently shown that such industry theorising around narrative innovation is an issue not solely relegated to the indie sector. For instance, it is significant that both of the AAA games analysed in this thesis (*Alien: Isolation* and *Tomb Raider*) featured strong female protagonists and suggested an active attempt from developers to inject diversity of representation and gameplay types into their work. In terms of *Alien: isolation* (Creative Assembly, 2014) Dion Lay explicitly referenced *Men, Women and Chainsaws*, Carol Clover's (2015) study of gender in horror films, in guiding his understanding of Amanda Ripley as a character, an instance of industry theorising linking to actual academic theory [DL49]. Furthermore, unlike the somewhat patriarchal comments of *Tomb Raider's* Ron Rosenberg, Lay imagines the player's relationship to the protagonist to be one of empathy rather than paternalism: "there was the sense that we didn't want a real macho character, we wanted a really relatable character... It's about making her fit what the player is feeling and what they can do, in terms of her abilities" [DL50], but the inclusion of a female character was not only enacted for gameplay or narrative purposes, but because of an innate need to redress a balance in gender inequity in videogames culture. As Lay says it was a choice that just "felt right" because "I don't think there's is enough female protagonists" [DL49]. Meanwhile Catherine Wooley, a level designer on the same project, explicitly frames her enthusiasm around modern video games in terms of their ability to tell new stories and specifically relates this to gender: "and it's the right move that games are taking, especially with games taking in subject maters that weren't in games before and telling different stories and having females as main characters" [CW59].

The issue of representation in games rebounds back upon the connected issue of workplace

diversity, with Rhianna Pratchett, a regular spokesperson and industry theorist on such issues,

perhaps saying it best: "I don't know too much about the makeup of the industry, but it seems that

our audience is far more diverse than the industry or the characters in our games. We're way behind

our audience when it comes to diversity" (Rhianna Pratchett quoted in Takahashi, 2016). For

Pratchett this issue is particularly pertinent to the field of narrative, since this is where the work of

positive representation is most likely to be conducted, but also it ties directly into the

creativity/commerce dialectic chapter 2 found to be at the heart of the industry. For Pratchett a

certain degree of risk is essential to meet newly emerging audiences half-way by making bolder plays

on the issue of representation, and such plays have to come from with established game cultures as

much as from pressure from without:

> There's a lot of scrutiny of female characters, so I imagine that there'd be a lot of scrutiny of
>
> any other ethnicity or sexual orientation. But you have to take the risks! There have to be
>
> the people that do take the risks. And it probably does have to be the big guys. (Rhianna
>
> Pratchett quoted in Lejacq, 2013)

As I have been arguing there is a large degree of reciprocity – or an interactive feedback loop to use

language more suited to gaming – that means that as new audiences emerge they enact progressive

change in the medium through their consumer demand for content that speaks more directly to

their experience (or, alternatively, the general demand a more discerning and mature audience

might have for more diverse stories regardless of their own identity) or enact these changes directly

through entering the workforce itself. This diversification justifies risk taking by the industry, leading

to new texts that tell new stories for these emergent audiences. Such opportunities are first noticed

and acted upon by indie studios more structured towards risk-taking and innovation, but once

proven here they seep into AAA development – as argued in my chapter that looks at the interdependence of these two sectors, which are too often artificially separated out form one another in both industry and academic discourses. In an ideal world this virtuous cycle, an unravelling of the current industry spiral model (Dymek, 2012) which reinforces conformity, leads to high profile works that attract further non-traditional players into gaming. Pratchett's experience as an industry theorist speaks directly to this reciprocity:

> Another thing that came up at the EA summit was the fact that companies face this problem from two sides. On one hand, they have to deal with potentially obstinate parts of what's understood to be "gamer culture today." But on the other hand, how can you expect gamers to be accepting if a studio isn't willing to create these kinds of characters in the first place? Where does responsibility lie? Obviously not solely on one group or the other. (Rhianna Pratchett quoted in Lejacq, 2013)

This is very much apparent in the way *Gone Home* broke out into mainstream consciousness as a new type of game, and also explains the level of violent resistance it encountered by a reactionary fan base of core gamers who were determined to demonstrate that it was not a real game, most evidently in the overlap with the reactionary discourses of Gamergate, which perhaps best illustrated the backlash from an established core gamer identity perceived to be under threat:

> The very nature of the videogames this avant-garde of developers is creating has been answered by violences from a hegemonic videogame culture defending an outdated comprehension of what videogames are. Although Gamergate was at its core a jaded and abusive man mobilizing an online mob to harass a developer because of their gender, the anger that gave that mob momentum was one centrally concerned with who gets to decide what videogames are. (Keogh, 2018a, p. 197)

Such insights from developers like Pratchett and Gaynor above are often based on gut feeling as much as analytical analysis but this more organic set of interpretations are still grounded in the practitioner's empirical experience and constitute a kind of intuitive industry theorising that I would argue provides far more nuance than the quantitative macro-level industry statistics. In particular, some practitioners like Ryan Payton, Steve Gaynor and Sean Vanaman, are willing to stake their careers and reputations on their hunches, leaving relatively stable positions at big studios for the gamble of making it in an increasingly crowded indie marketplace. Through enacting these trajectories they help to bring into being the very realities of creative freedom they speculatively imagine.

These emancipatory trajectories with their emphasis on creativity and broadening of the field of play, have been backed up in some way by the statistics, which seem to demonstrate considerable shifts and expansions in the audiences for gaming. In the last decade the amount of women in games production is slowly increasing and the industry has galvanised around the challenge of improving that figure with entities like 'Women in Games' (2019) and initiatives like 'Women Who Code' (2019) seeking to improve female engagement in games work and other STEM subjects, which have historically been dominated by men (Fullerton et al., 2008; Ivory, 2006; Jenkins, 1998a; Jenkins and Cassell, 2011; Malkowski and Russworm, 2017; Nooney, 2013; Prescott and Bogg, 2010; Ray, 2004; Thornham, 2008; Vermeulen et al., 2016). The industry also regularly boasts of growing numbers of female players, challenging the prevailing assumption that videogamers are stereotypically young and male. For instance, a recent Electronic Software Association (ESA) report (2018) prominently boasts that "45% of US gamers are women." But whilst such reports superficially seem to speak to tangible progressive change, unpacking this impressive statistic further would reveal that most such players are frequently ghettoised within niche genres targeted at a stereotypical and simplistically understood female player archetype within the casual or mobile

sphere. Shira Chess (2017) has noted that such games are explicitly structured to fit into the striated free time of women undertaking domestic routines often employing a 'freemium' model (free to download, with hidden costs of 'microtransactions' imbedded within) with the somewhat exploitative aim of converting casual players into regularly paying subscribers.

The ratio of female players within core AAA titles is likely much lower, something argued by Sheri Graner Ray (2004, p. xvi) in the opening of her *Gender Inclusive Game Design*, though such granular reports are rarely produced (after all it would undermine the industry's message that they were keeping pace with efforts for gender parity). For instance, a more recent report from the ESA (Ipsos, 2019) broke down gendered engagement with game genres by generation and found that boomers were far more likely to play casual and mobile games, whilst millennials more often played in genres more associated with core gaming habits (RPGs, FPS, Racing). Whilst the generational split is stark, with most boomers (male or female) playing casual games on smart phones, even in the millennial category there was a large discrepancy between favoured platforms between genders. Whilst female gamers in this demographic were stated to enjoy action games, 69% of male players played predominantly on consoles whilst the same percentage of female gamers preferred to play on smartphone. Whilst the industry at large trumpets the data suggesting gender parity in play, even though this is based on spurious and generalised use of data, they remain curiously quiet about the correlative role women play in creating games, which remains comparatively low despite the seeming renaissance in female play – a mere 22 percent of the workforce according to a report conducted by the Independent Games Development Association (Weststar et al., 2016).

Ruffino draws on Katherine Hayles, who reminds us such data, which make orchestrations towards scientific objectivity, are always socially embedded (Hayles quoted in Ruffino, 2018a, pp. 10–11), and such a process can be seen in the tendency for the industry to emphasise positive statistics, or making the data so general that the specificity is lost. For instance, the ESA report, in contrast to the

prominence it places on the female player base, neglects to mention the corresponding make-up of the industry workforce. In response to this threat of change, and all the new possibilities and reconfigurations of power relations it entails, Ruffino sees the industry as acting in denial, insisting that "the new actors, practices of play and modalities of production of games may appear different, but they are consistent with those of the past" (2018, p. 2). Such considerations of the industry paying lip service to progressive change reveals the importance not only of handling statistics critically but also of being aware of the efficacy of our methodology to account for all that it is important. As pointed out earlier, a qualitative method is more able to capture these nuances by exploring the realities often obscured by the explanatory apparatus of statistics and big data.

The large and increasing numbers of players and sales evident in such surveys, especially impressive during a sustained global recession, give the impression of a highly stable and unified industry that may be easily summarised and taken in at a glance. However, these impressive numbers serve to maintain the commercial scale of the industry not only at the cost of neglecting workplace diversity but also by side-lining the experimental and increasingly critically and commercially successful works being undertaken on the industry's periphery. Such a depiction of a calm surface presented in official statistics serves to disguise the actual turbulence of an industry undergoing several interlocking crises as it negotiates rapidly changing practices on all levels of production and consumption, as well as significant cultural struggles over fundamental ontological and epistemological issues including what games are and who they are for (Consalvo and Paul, 2019; Keogh, 2018a). Whilst the level of transformation of the medium's audience and workforce in terms of gender is less impressive than it would originally seem, this does not elide the fact that some progressive change has occurred (indeed female production in the industry has indeed doubled in the last decade, and this is the cause for some hope). As Chess argues, the imaginary female player base that the industry has designed themselves may not fully exist in reality, but their presence in the discourse none-the-less enacts real change: "this theoretical woman player is trapped within the stereotypes of expectation.

But she is also powerful. She illustrates the influence the consumer can have to reform and change a system that was not initially intended for her" (2017, p. 6).

Furthermore, as the industry increases in scale many argue that it must broaden its remit in order to attract audiences beyond its traditional core (Dymek, 2012; Fron et al., 2007; Ray, 2004) in order to retain profitability, making diversity an economic as well as a moral imperative. Accompanying this dramatic change is a concurrent change in attitudes, which Keogh (2019a) has observed sees the industry transition from aggressively informal nature of its often romanticised hacker/shareware origins (Crogan, 2011; Levene and Anderson, 2012) to aggressively formalised nature of its current oligopolistic arrangement (Kline et al., 2003, pp. 171–172). As the above statement from Ruffino that begun this thesis suggests, these consolidations have led to a movement away from the formerly stable understanding of the gaming audience as what Dymek (2012) has referred to as a "subcultural" group of geeky young men, and has instead followed the lead of television in its fragmentation into a wide array of interest groups in a post-network era (Gitlin, 1994).

Since female gamers seem to be the most significant of these emerging interest groups (Chess, 2017; Juul, 2012), it is my contention here that gender is perhaps the single most prominent and pressing social issue to emerge in games industry discourses in the last decade, especially in the context of such dramatic industry shifts, and is thus an unavoidable point of negotiation for any examination. The 'hegemony of play' model put forward by the Ludica Collective and discussed in the introduction was a key early intervention pointing out how the industry has historically perpetuated and maintained a highly standardised player base that actively precludes radical innovation, and how this might finally be breaking down. Regarding this point, it is significant to note that this article was produced before the indie sector took off in earnest and just as Nintendo were releasing their Wii console, so celebrated for its accessibility (Jones and Thiruvathukal, 2012; Juul, 2012). Indeed, the authors are confident that change is in the air as such initiatives potentially, "return game-playing to

a more inclusive activity that embraces diverse interests and embraces the whole family" (Fron et al., 2007, p. 8).

There is evidence now that the authors of this seminal article were right to be optimistic, since the comfortable homogeneity of the industry now appears to be giving way to a heterogenous new arrangement, led by a polyglot assemblage of diverse voices including a growing cadre of queer (Shaw, 2015), female (Chess, 2017; Juul, 2012) and black (Malkowski and Russworm, 2017) players that do not fully align with the hegemonic model. Ruffino proposes that the result of this influx of new voices is the disruption of the industry and its products as stable objects, and as a consequence the destabilisation of the hegemonic paradigm of the gamer which has been historically created and maintained through them (2018a, pp. 14–15). The industry is pitched between the seemingly contradictory desire of continuing to appeal to an established and reliably stable traditional fanbase or to cater to these immense reserves of new audiences (dismissively often termed 'casuals'), by exploring new ludic and narrative formations.

According to actor-network theory such identities as that of the gamer are not static or permanent, but circulate within a given network of social links and can be temporarily subscribed to in specific moments of performance (Latour, 1999). In a sense the term gamer, which has come under heavy scrutiny in recent times due to its implied exclusionary nature, functions as a social explanation (Latour, 2005, p. 147) – a heuristic shorthand to describe a complex set of networked associations constantly at play. Like a genre, it is a convenient way for us to describe a phenomena but should not be seen as coterminous with reality, in the same way that in *The Pasteurisation of France*, Latour (1993a) uses terms such as the 'Pasteurians' and the 'hygenists' in inverted commas to temporarily connect together heterogenous groups of actors into temporary alliances that further a specific set of interests. The idea of the 'gamer', therefore, is an overdetermined discursive construct constantly being produced and reinforced by, amongst other things, the mode of address of marketing

materials (Kline et al., 2003), online discussions and group boundary formation of the sites of videogame fandom (Massanari, 2017), the prevalence of a certain type of player character within games that has been referred to as the 'scruffy white male' problem (Kaiser, 2014), the militaristic themes of the majority of AAA games (Dyer-Witheford and de Peuter, 2009; Huntemann and Payne, 2009), and the macho structures of the industry itself (Prescott and Bogg, 2010; Weststar, 2015). Crucially the constructivist nature of such identities make them subject to change if enough force is applied from both within and without, and in my analysis of the indie sector I have drawn on Raymond Williams' potent notion of emergent vs dominant structures as a means to illustrate the real and often complex processes such translations are occurring in.

In short the 'gamer' describes a form of identity culturally created through the active "practice of consumption" (Storey, 2018, p. 59) and purposefully "crafted and cultivated by a consolidating videogame industry to be a stable, homogenous target audience with narrow tastes defined by 'authentic' gameplay" (Keogh, 2018a, p. 179). This problematic notion of 'authentic' gameplay describes the common characteristics of the dominant AAA paradigm through which the hegemony of play is expressed and perpetuated, as explored through the trade stories of chapter 2. Following Bourdieu's famous concept, it provides a kind of habitus, or a "system of dispositions", that classifies a particular social group or class of consumer around a particular set of practices and values that are deemed better than others (2010, p. 6). But if such identities are bound up in habits of consumption, and if, as we have seen those habits are shifting and diversifying, then the identities that sustain them must be fragmenting also. Indeed, it is this system of dispositions that writers like Paolo Ruffino (2018a), Shira Chess (2017), Aubrey Anable (2018), Christopher Paul (Consalvo and Paul, 2019) and Brendan Keogh (2018a), who represent a new wave of game academics, believe are being challenged by the indie sector and other grass-root developments within the games industry.

Such assumptions around the core gamer and what counts as authentic gameplay are a large part the legacy of the ludological position critiqued in the introduction, which was built so heavily upon the foundations of rigid definitions of play that emphasised its agonistic nature over and above other categories or forms of expression. Though it softened over time, this approach still undergirds much of game studies' dominant paradigms, so much so that their definitions of play have bled out into the larger cultural discourse. This is evident in the rhetorical similarities between reactionary popular attacks on walking simulators as 'not real games' on forums across the internet and orthodox game studies' narrowly formalist definitions like the classic game model, each focused solely on the agonistic qualities of games. The term agonistic is an ideal adjective because its meaning evokes the notion of 'competitiveness' that animates the dominant paradigm of games, as well as a 'polemic' of the kind that characterised the tone of the ludologist rhetoric.

As the introduction's close historicization of the ludology/narratology debate has shown, game studies as a discipline has emerged alongside the hegemony of play and has unintentionally served to reinforce and perpetuate the image of the dominant male gamer by valorising hardcore commercial games as core objects of study (meaning that such games come to dominate the canon and form what Williams refers to as a selective tradition), then deriving from this canon taxonomies and definitions of play that crystallise those values in the same manner that values become embedded in game engines and other apparatus. In short, rather than critique and problematise the entrenched ideology of the player, the field of game studies has adopted it whole cloth and used it to construct a number of theoretical notions that empower the hegemonic gamer identity and place it at the centre of the text. This can also be seen in the emphasis most theorists give to the notions of interactivity (Aarseth, 1997; Eskelinen, 2001), simulational reconfigurability (Bogost, 2010; Friedman, 1998), or player agency (Galloway, 2006; Newman, 2004) all of which place the player in a dominant position of mastery vis-à-vis the text (Jenkins, 1998a).

Indeed, in this paradigm the purpose of the designer, who has been the object of this study, is typically judged on their ability to accommodate the creative performance of the player rather than express themselves per se. As Zackariasson and Wilson argue, "developers face the challenge of making these parts work well together and providing balance in the game. If they succeed, the gamers will not notice any irregularities in the representation of the game they are playing. They will, in a sense, be one with the game and feel immersed into its world" (2012, p. 5). But in this scenario the developer is powerless to (re)define games, rather they merely work to assemble the pre-ordained components and then disappear into the ether, leaving their work as a neatly sealed black box. The scenario proposed by Zackariasson and Wilson above is reminiscent of an official industry account of production, similar in fact to the TV executives that Gitlin finds deliberately emphasise the mysteries of production in order to efface or deny any sort of dominant worldview, positing instead a subjective process via, "an insistence that each executive asserts individual taste, judgement, and sense" (1994, p. 25). Games industry executives perform a similar obfuscating function in repeating the longstanding claim of videogames that their number one priority is the total immersion of their players into the gamic text, and hence their aversion to any form of politics that might get in the way of this.[155]

Marie-Laure Ryan notes how this notion of immersion as invisibility of the materiality of the medium has typically been critiqued amongst intellectuals since it results in an escapist and uncritical engagement with the text and "promotes a passive attitude in the reader" (Ryan, 2003, pp. 10–11). Although she ultimately rejects this model of immersion, insisting on one that, like Wolfgang Iser's notion of reader response theory (Iser, 1980) or the encoding/decoding model of cultural studies (Hall, 2007), requires an active engagement with the text. In the industry account, I would argue, the

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[155] Ubisoft CEO Yves Guillemot has gone as far as saying repeatedly that his company's games don't take a hard stance on political issues, even though recent entries include games set in a South American narco state (Tom Clancy's Ghost Recon Wildlands), during the French Revolution (Assassin's Creed: Unity) and in an imagined post-apocalypse America ruled by a far-Right militia (Far Cry 5) (Stuart, 2018).

player's involvement in the game (their immersion and interaction), is perversely used as an alibi to support the publisher's own claims of political neutrality since, like Barthes' liberated reader, the player can always be posited as the ultimate source of a game's meaning. Furthermore, because the game as a nonlinear text can be encoded with all kinds of competing messages, it can support or reinforce whatever reading the player wants from it: for instance, player A choices to support NPC X's position on issue Y and performs action Z, meanwhile Player B chooses not to, and each opens up further material that leaves their worldview unchallenged based on the decision made. In such a scenario the game and its developers ultimately refuse to take any kind of recognisable moral stance, deferring this to the player instead. Hence modern games can tackle controversial topics without overly alienating players from the political Left or the Right, and whilst being able to say that they are not 'political'[156] to avoid alienating the growing body of game fandom who insist politics should not be tackled in games at all, as observed by Aubrey Anable (2018, p. xvii).

For instance, in the lead up to its release the developers of *Red Dead Redemption 2* (Rockstar North, 2018), studio founder and spokesman Dan Houser caused controversy by downplaying the materiality of the labour required to produce their virtual products, doubling down on previous off-hand comments made about members of the team working 100 hour weeks by suggesting that games were made by a kind of magic:

> Sam [Houser] and I talk about this a lot... and it's that games are still magical. It's like they're
> made by elves. You turn on the screen and it's just this world that exists on TV. I think you
> gain something by not knowing how they're made. As much as we might lose something in

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[156] The most egregious recent manifestation of this has to be Infinity Ward and Activision Blizzard's repeated claims that Call of Duty: Modern Warfare 3 isn't political (Chalk, 2019) despite controversially depicting such realistic torn-from-the-headlines sequences such as a suicide bomber in Piccadilly Circus and a particularly insidious attempt to rebrand the notorious 'highway of death' in the Gulf War as a Russian war crime, when in reality it was an all American massacre (Kent, 2019).

terms of people's respect for what we do, their enjoyment of what we do is enhanced.

Which is probably more important. (Dan Houser quoted in White, 2018)

Here we see how the invisibility of the infrastructure of the game whilst playing reinforces the invisibility of ideology and also echoes the invisibility of the labour drawn upon to make the game, for the less it appears games are made by humans with real emotions, subject positions and opinions, the easier it becomes to deny they are political and cultural artefacts. Thus the notion of the game as apolitical text only holds as long as it is seen as a 'black box,' in which the product becomes an hermetically sealed and mute object that stands in for and obscures all the social arrangements that bought it into being and into which all artistic intent is subsumed.

Just as the games industry and game studies are currently undergoing massive shifts and reorientations, so too is the figure of the player within the narrative and mechanical logic of the game's systems, and the example above of Latour's dethroning of the idea of Pasteur reveals the method's relevance in helping to explore and disarticulate the complex networks of production and consumption that are too often obscured by simplistically understood structures such as game studios that act as black boxes, a form ANT works to deconstruct and peer inside (Latour, 1988, p. 4). Indeed, in an attempt to probe the implications of ANT to methodology more broadly John Law (2004) has characterised it as a method par-excellence for attending to the 'messiness' of much modern sociological realities, a perspective that applies very well to games; shot through as they are not only with real physical links but a myriad of virtual networks that fundamentally alter the way the industry interfaces with its public and the ways in which those publics can organise into specific interest groups.

Videogames are, by the multidisciplinary nature of their production and the interactivity they embody both as texts and within highly engaged fan communities, deeply complex multimodal

artefacts. Games possess an intrinsic heterogeneity[157] that flies in the face of any attempt to totalise

or universalise, and the explosion of new forms of play most notably in the indie sector means that

any highly universalising definition will flounder. At best continuing such reductive lines of thought

embedded in the formalist critical orthodoxy such as Juul's classical game model, doom the

discipline to irrelevance (an academic bickering over tiny unimportant issues of form, unlikely to

have any resonance or impact within the wider sphere), and at worse fan the flames of increasingly

polemical debates in the real world (by providing rigid definitions that can be mobilised and

weaponised by exclusionist modes of thinking like Gamergate).

The moment of transition authors like Keogh and Ruffino have noted in the industry, in which a

dominant definition of what a game is and who it is for is being challenged by massive new sectors

like indie and mobile phone development, is riven with crisis (characterised by Berlant as an

emergent set of affairs against which the current social arrangement is preparing to bolster itself) as

might be expected in the rapid change of a popular medium upon which the identities of many have

been predicated for many years. The fall out of such changes can be seen in struggles for workplace

diversity in the games industry (Harvey and Fisher, 2015; Weststar et al., 2016), and the increased

attention on sexual harassment (Jane, 2018; Yang, 2017), efforts towards unionisation (Legault and

Weststar, 2015; Maiberg, 2017; Robb, 2017), and the rise of the Gamergate movement and its

targeted attacks on female developers and critics in an attempt to retain the space of games as one

exclusively for traditional audiences of white, male players (Kuchera, 2014; Quinn, 2017; Ruffino,

2018b).

As a final demonstration of the applicability of this method, and to tie up the core discussion of AAA

and indie sectors, I now draw on Michel Callon's notion of dialogic democracy. In his thorough

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[157] Some refer to this as uncertainty (Costikyan, 2015), ambiguity (Sutton-Smith, 1997), fluidity (Ruberg, 2019), or contingency (Malaby, 2007).

application of actor-network theory to the relations between democracy and technoscience, Callon notes the importance of what he terms 'hybrid forums', diverse councils that mix experts and citizens to create the maximum amount of negotiation addressed towards the 'overflows' that are an increasing feature of techno-social democratic society. Such overflows, events that create a great deal of uncertainty like nuclear waste disposal or genetically modified crops (what Berland would refer to as crises), demand such interventions that combine research in isolation (Callon's term for the work of scientists or academics sealed away in secluded laboratories or ivory towers) and research in the wild (the efforts undertaken by a local populace to understand and campaign against the overflows as they are affected by them). Borrowing this terminology we can see that the historic lack of diversity in games coupled with a growing audience of marginalised gamers creates an overflow in the form of a conflict between a current state of affairs and the shifting desires and expectations of a diversifying audience. Studios like Fullbright, in contrast to the secretive activities of AAA (O`Donnell, 2014) studios who hermetically seal themselves from wider culture even as they replicate its norms and conventions, become such potential hybrid forums, embracing a diverse work force and more transparent, agile methods in order to negotiate creative solutions to the blockages of the industry. As demonstrated in chapter 3 the indie sector has provided a potent space for the overflow of disgruntled talent from AAA industry, and in turn a site in which solutions can be worked on before being fed back into AAA cultures to potentially enact lasting change.

Overflows are similar to what Latour has termed controversies (explored throughout this thesis), and are considered productive of dialogic democracy for Callon because they: "help to reveal events that were initially isolated and difficult to see, because they bring forward groups that consider themselves involved by the overflows that they help to identify" (2009, p. 28). Such "unforeseen actors" reciprocally move forward the discourse by "launch[ing] themselves into the debate and propos[ing] new lines of exploration" (Ibid., p. 27). The purpose of such activity is through the

iterative process of dialogic democracy, to create a common world, built from a cocreated consensus that works for all:

> No doubt the most general definition of what we understand by a common world is a world with the double characteristic of being quite real, since it is the result of a long process of objectification, and of being inhabited by subjectivities that are adapted to each other and directly involved in this world. (Callon et al., 2009, p. 147)

Callon distinguishes this ideal of dialogic democracy with the incumbent reality of delegative democracy, in which representatives are elected to speak on one's behalf, and politics becomes a kind of corrupted ghost of the market competing for votes (bringing it closer in line, once more, with the competitive force of agon). For Callon the identities of emergent groups, who potentially become stakeholders in hybrid forums, is highly unstable and deeply bound up in technoscience. In a reciprocal manner that recalls Dymek's industry spiral, groups are called into being through a process of categorisation (controversies create an inventory of such groups and issues) which often happens through hierarchical means, for instance a vision of the gamer is fabricated by an industry, and this discursive construct in turn produces and stabilises such a group in reality (as per Chess' analysis of 'player two'). Meanwhile because any in-group also constructs an excluded out-group against which it is defined, this sets the stage for resistance. The tensions between these groups result in a change to the discourse (which in turn may unearth new identities who come forward and demand to be represented). Like Raymond Williams' notion of emergent groups which issue a challenge to the dominant hegemonic model, according to Callon such entities are "constantly under the threat of being absorbed too early by delegative democracy" (2009, p. 151). This act of appropriation is desirable for the dominant hierarchies of power (delegative democracy for Callon, the AAA industry here), who prefer to control the situation in a top down manner and defend the status quo by holding the public at arm's length so it may decide on its behalf. For instance, we have

seen through the analysis of statistics above how the industry speaks on behalf of a player base whose identity it alone claims to be able to define. Meanwhile indie development – with its greater focus on ad-hoc collaboration, flattened hierarchies and direct link to the audience – seeks to reject this arrangement, striving for a dialogic structure by assembling closer to an idealised hybrid forum, pitched between the AAA industry and shifting gaming cultures. Such studios balance professional expertise and commercial acumen (often wrested from the AAA industry) with affective and highly personal creative endeavours that expresses itself both in a new forms of storytelling and a new breaking out trade story that frequently manifest within the game text itself as a statement of purpose.

If, as I maintain, the game industry can be productively thought of as such a hybrid forum – with AAA representing research conducted in isolation and indie as research in the wild (or at least closer to the emerging audiences) – then not only is it apparent that the two sides of the industry must be looked at together and appreciated as existing in a reciprocal relation of interdependence, but for such a messy arrangement an equally messy set of methods is required, like those called for by John Law to account for the flux of real social processes. I have attempted to present such a method here. It is one that attends to both the production context using techniques from production studies and actor-network theory to elucidate the complex links between actors and the flow of ideas between them, but one also informed by exploring the relationship of the game as a textual artifact reading it via an extension of production studies into the text (for instance my concept of breaking out stories) as much as applying textual analysis to the game studio as itself "an ensemble of texts, themselves ensembles, which the anthropologist strains to read over the shoulders of those to whom they properly belong" (2005, p. 86).

Soraya Murray has provided an excellent recent attempt to intensify the urgency for approaching games with a context aware cultural studies approach in light of recent traumatic shifts in game

cultures (not least of which saw the emergence of Gamergate as a concerted effort to retain

videogames in its orthodox form). The highly insightful readings of several high-profile games ends

with the claim:

> Playable representations matter. They are affective fictions critical for our imaginative
>
> capacities to envision potential geopolitical eventualities. Their extremely potent
>
> anticipatory images suggest that the tools of cultural analysis are needed – more than ever –
>
> to both unveil their significations within the context of their making, and to make sense of
>
> what dreams we carry into the future. (S. Murray, 2017, p. 228)

Whilst I would concur wholeheartedly with this claim, I would also point out that aside from a few

scattered developer quotes there is little in the way of what would count for the kind of analysis that

might 'unveil their significations within the context of their making'. There is an occasional tendency

in Murray's work to consequently make claims about the creator's intent (as though they were a

unified entity) based solely on an interpretation of the text, as per her passing remarks on the

crossroads trailer controversy from the *Tomb Raider* reboot (S. Murray, 2017, pp. 135–136), which

as I have tried to show via interviews with Rhianna Pratchett and considerations of the competing

stakeholders of the producers, PR departments, and the imagined player, makes for a more

complicated web of intentions than a mere top down paternalism. Being overly absolute in readings

of these texts ignores their complexity and forecloses the agency of both player and developer in the

process; dismissing the ability of the player to make a resistant reading of the situation, which many

authors have noted is often the case with *Tomb Raider* given Lara Croft's ambiguous design and the

complex circulation of meanings around her virtual body (MacCallum-Stewart, 2014; Schleiner,

2001), meanwhile developers in such a thought process are cast in a role like the passive

intermediaries depicted by Zackariasson and Wilson, simply uncritically passing on a set range of

meanings on without having any influence over them. Such a simplistic reading of the developers ignores the actual complexity of industry theorising this thesis has tried to surface.

I would maintain that in order to make such an unveiling, which I would agree is necessary, one would need to attend more directly to the production context using a method informed by political economy but by the anthropological thrust that underpins cultural studies itself – a method that has long sought to connect the production culture with the wider culture of consumption as indicative of Stuart Hall's (2007) encoding/decoding model and as put into practice by the classic study of the Sony Walkman as cultural object by Hall and fellow members of the Birmingham Centre for Contemporary Cultural Studies (Gay et al., 1996), which situated how the device's meanings operate within a 'circuit of culture' that links the production apparatus with consumption cultures. It is such a method that I have tried to flesh out here, building on the work of several others (Chess, 2017; Chia et al., 2019; Jenkins, 2008; Keogh, 2019a; Nooney, 2017; O`Donnell, 2014; Ruffino, 2018a) I see striving in a similar direction to reassemble game studies as a discipline that does not just end with the game text as the object of study, but looks too at the interconnections between the wider contexts of play and production. This would see us truly moving away from the formalist deadlock of the ludology/narratology debate and its legacy, in what I have called orthodox game studies as explored in the introduction, to one that truly attends to the messy artifact of games. As Ian Bogost (2009) has said of games as a medium of study in a DiGRA keynote speech, "videogames are a mess. A mess we don't need to keep trying to clean up, if it were even possible to do so." Answering John Caldwell's (2009) call for an approach to media studies that marries the normally opposed schools of thought of bottom up cultural studies with top down political economy, this thesis has tried to provide such a model, but one that does not seek to reveal a unified message or pure intention in the production context (as Murray sometimes assumes to be the case) but one that returns to the myriad complex ways ideologies and readings play out in actual production environments.

This is to say that game studies would benefit hugely from a return to the actual context of production, but not as a kind of narrow auteurism that commits the fallacy of ascribing meaning making to a narrow range of visionaries, but one that sees such vision dispersed within actor-networks. In short one that takes the producer to be both real and imagined in the same sense as the audience in Ien Ang's terms. Taking a lead from actor-network theory these should be understood as temporarily stabilised assemblages of many different trajectories, fundamentally shot through with various tensions and contradictions; a flux of competing ideas and ambiguous ideologies characteristic of what I call a collaborative poetics of production. Such messy hybrid forums of videogame development can only be got at through an equally messy method.

Appendices

Appendix A: List of interviewees approached
Appendix B: Complete list of Themes before sorting
Appendix C: Theoretical Narrative
Appendix D: Sample release Form
Appendix E: First Point of contact Letter format
Appendix F: Semi-structured Interview protocol

Appendix A: List of interviewees approached

The following is a complete list of interviewees approached by letter and/or email. The final list of interviewees can be found at the start of Appendix C. The profiles below outline brief biographies for each potential research participant giving an indication of why I felt each one was appropriate the study based primarily on their involvement with prominent narrative based games and secondarily on secondly on their public speaking or writing profiles, which demonstrates a deeper involvement in industry theorising. Together they make up a non-exhaustive, though substantially thorough, list of some of the most important practitioners working with narrative at all levels of the industry (from AAA to indie). A partial synchronic snapshot of the state of narrative in the games industry.

WAEL AMR

Current Position: Founder and CEO Frogwares
Principle Games: *The Testament of Sherlock Holmes* (2012), *Magrunner: Dark Pulse* (2013), *Sherlock Holmes: Crimes and Punishments* (2014), *The Sinking City* (2019)
Location: Kiev, Ukraine
Outcome: Recommended by Tom Rawlings. Responded positively but requested an interview via email.
Profile: Wael Amr founded the independent Ukrainian studio Frogwares in 2000 in Kiev, which according to its website now has 80 employees. It is known for prolifically releasing narrative driven graphical adventure games, especially those based on public domain intellectual properties (Sir Arthur Conan Doyle's Sherlock Holmes and H.P. Lovecraft's Cthulhu mythos) and other classic adventure novels. Its Sherlock Holmes games have sold 7 million copies worldwide, and the studio was called "one of the genre's best kept secrets" by specialist website advernturegamers.com, so I felt his experience working with adapting novels would add an interesting perspective to the study.

TAMEEM ANTONIADES

Current Position: Founder and creative director, Ninja Theory
Principle Games: *Kung Fu Chaos* (2000), *Heavenly Sword* (2007), *Enslaved: Journey to the West* (2010), *DMC: Devil May Cry* (2013), *Hellblade: Senua's Sacrifice* (2017).
Location: Cambridge, UK
Outcome: Approached at Wellcome Trust's 'Be a Better God' panel at 2015 Develop, where he politely declined to be interviewed.
Profile: Tameem Antoniades is an Afghan-born coder and intered the games industry in 1995 working for Millennium Interactive and Sony Cambridge, before founding his first studio Just Add Monsters in 2000 in Cambridge, UK where he developed *Kung Fu Chaos*, published by Microsoft Game Studios, and in 2005 changed the name of the studio to Ninja Theory, which was recently acquired by Microsoft (for an undisclosed amount). The studio, which specialises in motion capture and is a world leader in producing highly realistic 3D models, worked with the Wellcome Trust and leading neurosurgeons to develop the BAFTA award-winning *Hellblade: Senua's Sacrifice*, which was praised for its depiction of mental illness. Antoniades is now in the process of setting up a tech start-up called the Insight Project developing a virtual reality therapy scenario for clinical use with University of Cambridge psychiatrist Professor Paul Fletcher. His involvement with medical science and at the cutting edge of motion capture technology (having collaborated with Andy Serkis) which has had a transformative effect on videogame storytelling makes him a desirable interviewee.

GILES ARMSTRONG

Current Position: Co-founded Talespinners. Narrative designer.
Principle Games: *Velocity 2X* (2012), *My Child Lebensborn* (2018), *Destruction AllStars* (2020), *Horizon Forbidden West* (2021).
Location: UK

Outcome: Was willing to be interviewed but we couldn't get our schedules to line up.
Profile: Since 2007 Giles Armstrong has written on over 50 projects, including BAFTA-winning My Child Lebensborn, the TIGA award-winning Velocity 2X, and The Spectrum Retreat - for which Giles received a Writers' Guild of Great Britain Awards nomination for 'Best Writing in a Video Game'. He co-founded Talespinners, a narrative outsourcing studio, with Ian Thomas in 2016. Since I had worked with Giles at the gaming blog Ready Up I knew him to be a talented individual and a rising star with keen insights, perfect for the study.

MIKE BITHELL

Current Position: Founder/director at Mike Bithell Games (independent)
Principle Games: *Thomas Was Alone* (2010), *Volume* (2015), *Subsurface Circular* (2017), *John Wick Hex* (2019).
Location: UK
Outcome: No Response.
Profile: Mike Bithell is a British video game designer and developer, best known for his work on *Thomas Was Alone*, one of the original indie darlings and a game renowned for creating empathy between the player and characters in the form of simple geometric shapes, and *Volume*, a futuristic/dystopian take on Robin Hood. He developed the prototype for Thomas Was Alone whilst working at Blitz Games as a junior level designer and continued to develop it whilst working at Bossa Studios, where he taught himself game design on the *Unity* engine. He released the game initially on the independent web portal *Kongregate*, but it would eventually gain a full release and sell over a million copies. As an outspoken critic of the games industry and a prolific speaker at public facing industry events, I felt he was also a potential industry theorist. Since I had interviewed him in the past for Ready Up, I felt I might be able to reach him.

MARCIN BLACHA

Current Position: Story Director at CD Projekt Red
Principle Games: *The Witcher Franchise* (2007-2015), *Cyberpunk 2077* (2020)
Location: Warsaw, Poland
Outcome: No response.
Profile: Marcin Blacha is a story director at the renowned Polish AAA studio CD Projekt Red, where he oversaw all the games in the highly acclaimed and best-selling Witcher series (based on the novels of Andrzej Sapkowski). He has also worked in the analogue games industry, where he has written two pen and paper RPGs (including Neuroshima) and is a former employee of Portal Games (a board game company). Aside from his prominent involvement in some of the most celebrated fantasy RPGs of the last decade, his online profile also says he has been involved in education running "courses educating game developers as a lecturer and conferences for game developers as a program board member", which would make him a good candidate as an industry theorist.

JONATHAN BLOW

Current Position: Independent developer
Principle Games: *Braid* (2008), *The Witness* (2016)
Location: San Francisco, California
Outcome: No response
Profile: Formerly the writer of the 'Inner Product' column for Game Developer Magazine and host of the Experimental Gameplay Workshop at the Game Developer's Conference, he is best known for developing one of the first breakout hits of the indie scene, Braid, which featured in Xbox 360's first 'Summer of Arcade', a high profile showcase of indie talent that was an important spotlight for the early movement. This was followed by the deeply philosophical puzzle game The Witness, which was one of the first indie games to be given the stage at Sony's press conference at E3. A founding

member of Indie Fund he now acts as an angel investor for indie projects, making him an important mediator in the sector. This along with his outreach work for the community and his best-selling critically acclaimed games makes him an ideal interview subject.

GREG COSTIKYAN

Current Position: Independent developer and games scholar
Principle Games: *Paranoia* (1984), *Star Wars: The Roleplaying Game* (1987).
Location: New York City, New York
Outcome: Refused via letter. Too busy to give interviews
Profile: Sometimes working under the moniker 'Designer X' Greg Costikyan is an independent game designer and scholar well known in game design circles for being a frequent and outspoken public speaker at the *Game Developer's Conference*. Aside from writing about game design for prominent publications such as the *New York Times* and the *Wall Street Journal,* and *Salon* he is also the author of several materials much drawn on in game design courses such as 'Where Stories End and Games Begin' (2000) and 'I Have No Mouth And I Must Design' (2002), which also position him firmly as a participant within the ludology/narratology debate (and thus of great interest to this thesis). He is also the author of *Uncertainty in Games* published by the MIT Press. In terms of game design his works include the pen and paper RPGs *Paranoia* and *Star Wars: The Roleplaying Game* (1987), and in 2005 founded Manifesto Games as a portal for indie games seeking to take advantage of the 'long tail' ecommerce model (written about by Wired editor Chris Anderson), making him an early experimenter in the indie sector, but closed the site in 2009 due to the economic downturn. He now works for Boss Fight Entertainment founded by former Zynga employees.

NEIL DRUCKMANN

Current Position: Vice President**,** Creative Director and writer Naughty Dog
Principle Games: *The Last of Us* (2013), *Uncharted 4: A Thief's End* (2016), *The Last of Us Part II* (2020).
Location: Santa Monica, California
Outcome: No response
Profile: Having worked at the celebrated in house Sony studio *Naughty Dog* for many years, including as a programmer on *Jak 3*, Israeli-American Neil Druckmann became a game designer on the first 2 *Uncharted* games, where he worked closely with narrative director Amy Hennig, only to replace her in that role when she left the studio in 2014. He helmed the fourth instalment in the celebrated and best-selling series *Uncharted 4: A Thief's End* and *The Last of Us Part II*, and in 2018 was promoted to Vice President of the studio. He has also written several graphic novels including A Second Chance at Sarah (2010). He received two BAFTAs, a DICE award and two Writers Guild of America awards for work on *The Last of Us* and is an outspoken critic of the games industry's over-reliance on endlessly producing white, male protagonists, citing Anita Sarkeesian as an influence. In *The Last of Us Part II* he produced a strong roster of female, gender-queer and ethnically diverse characters, much to the chagrin of hardcore players (which in retrospect would have made him an ideal interviewee to reinforce the emerging themes of the thesis).

JAKE ELLIOT OR TAMAS KEMENCZY

Current Position: Designers and founders of Cardboard Computer
Principle Games: *Kentucky Route Zero* (2013-2019)
Location: America
Outcome: No Response
Profile: Cardboard computer is a microstudio who for the last ten years have slowly been releasing segments of their episodic 'magical realist adventure game' Kentucky Route Zero, which explores many topical themes in modern America including debt, political polarisation and the loss of

community. As an early Kickstarter success-story the game took advantage of emerging routes to market to tell a unique story that was more influenced by the novels of Gabriel García Márquez and the films of David Lynch than typical videogame narratives. It is interesting for my purposes for being intensely story-driven but also for the sheer quantity of other forms it remediates from plays and community television, to homages of the early works of the games industry.

JOSEF FARES

Current Position: Game Designer, founder at Hazelight (an EA internal studio)
Principle Games: *Brothers: A Tale of Two Sons* (2013), *A Way Out* (2028)
Relevance: High **Contact Likelihood:** Medium
Location: Stockholm, Sweden
Outcome: Could not gain access through EA's PR.
Profile: A former Assyrian emigrant (who arrived in Sweden aged 10) Josef Fares is also a filmmaker known for comedy dramas like *Jalla! Jalla!* (2000), *Kopps* (2003), and *Balls* (2010). His lateral movement into videogames from cinema is a highly unusual instance of an industry trajectory that resulted in the creation of the highly acclaimed *Brothers: A Tale of Two Sons* (which was influenced by his childhood experiences in Assyria) with the help of Starbreeze, a studio better known for their AAA work in the action genre (for instance the game *Payday 2* (2013). Despite utilising many cinematic notions of visual storytelling, the work is extremely suited to the medium. The critical success of the game made him well known in games press and gave him the cultural capital to head a new studio, Hazelight, with another AAA publisher EA, where he released the innovative cooperative and narrative based prison-break drama 'A Way Out'. Fares movement into games is indicative of greater creative risks being taken on indie-style properties by large studios.

SIMON FLESSER

Current Position: Art, sounds and words, Simogo
Principle Games: *Beat Sneak Bandit* (2012), *Year Walk* (2013), *Device 6* (2013), *The Sailor's Dream* (2014), *Sayonara Wild Hearts* (2019)
Location: Malmo, Sweden
Outcome: Interview conducted via skype chat function, but unusued.
Profile: One half of Swedish indie microstudio Simogo, along with Magnus "Gordon" Gardebäck who primarily deals with code. The studio specialises in narratively and formally experimental iOS games, with other creative side projects including children's storybooks and podcasts. Their games feature minimalist graphics and literary overtures. Device 6, in particular, evokes the feel of early hypertext fiction, an experimental form that both Janet Murray's Hamlet on the Holodeck and Espen Aarseth's Cybertext focused.

TOBY FOX

Current Position: Independent designer and composer
Principle Games: *Undertale* (2015), *Deltarune* (2018)
Location: America
Outcome: No response
Profile: Toby Fox got his break composing music for the legendary web comic Homestuck whilst in his final year of high school. A long term fan of early JRP Earthbound, his debut game Undertale was made in homage to it but also acted as a profoundly subversive take on the genre, which included self-reflexive elements like forcing the player to erase files from the install directory. It was a breakout hit in the indie scene and resulted in his involvement with videogame magazine 'A Profound Waste of Time' and being featured on the Forbes 30 Under 30 list. Fox has what Casey O'Donnell calls a good 'breaking in story' and his subversive approach to genre speaks strongly to the themes of this thesis.

TOM FRANCIS

Current Position: Founder at Suspicious Developments (independent)
Principle Games: *Gunpoint* (2013), Heat Signature (2017)
Location: UK
Outcome: Contact provided by Tom Rawlings, no response.
Profile: Former Journalist at PC Gamer (until 2012) and now co-host of design podcast The Crate and The Crowbar, Francis taught himself game design whilst working as a journalist and made the acclaimed *Gunpoint*. Although his games are more system driven, Gunpoint is steered by an engaging and playful cyberpunk narrative that was reportedly added late into development. As an independent, self-taught developer as well as a former games journalist, Francis would provide an interesting perspective on the industry.

DAVID GAIDER

Current Position: Founder of Summerfall Studios
Principle Games: *Star Wars: Knights of the Old Republic* (2003), *Dragon Age: Origins* (2009), Dragon Age II (2011), Dragon Age: Inquisition (2014)
Location: Canada
Outcome: No Response
Profile: David Gaider was a lead writer for AAA studio Bioware in Edmonton, Canada, for 17 years where he worked on several important RPGs including Star Wars: Knights of the Old Republic and the Dragon Age Series. On the Dragon Age franchise he was responsible for creating the setting and several key characters as well as majorly contributing to the plot's direction as part of the larger writing team. He left Bioware in 2016 to join Beamdog, a studio making classic Infinity Engine style RPGs as creative director, and in 2018 broke away again to found Summerfall Studios to work on a game that was successfully funded on the games industry crowd funding platform Fig. As a long term employee at such a major studio Gaider would have an interesting perspective on the issue of writing a huge narrative universe as part of a much larger team. As an openly gay developer he would also speak to the issues of diversity the thesis addresses.

CHRIS GARDINER

Current Position: Lead Writer at Failbetter Games
Principle Games: *Fallen London* (2009), *Sunless Sea* (2015)
Location: London, UK
Outcome: Recommended by Alexis Kennedy. Interviewed
Profile: Chris Gardiner started out as a games journalist for sites like The Escapist before being invited by his friend Alexis Kennedy to work as a freelancer for Failbetter, a studio founded in 2009 by Alexis Kennedy and Paul Arendt to develop the long running online interactive fiction game Fallen London. As a freelancer, Gardiner wrote some pieces for Fallen London and an unpublished 'serious game' for Channel 4 and Childline. Gardiner was bought on fulltime and as a result of the studio's growth took over as head writer when Alexis Kennedy became creative director. Failbetter is unusual as an indie studio working on substantial ongoing narrative projects with a large writing team, where consistency must be maintained over time, thus making it an interesting case study in which to look at collaboration between writers.

STEVE GAYNOR

Current Position: Director and founder at Fullbright
Principle Games: *Bioshock 2: Minerva's Den* DLC (2010 – for Irrational), *Gone Home* (2013), *Tacoma* (2017),
Relevance: High **Contact Likelihood:** Medium

Location: Portland, America
Outcome: Recommended by Sean Vanaman. Interviewed
Profile: Steve Gaynor formerly worked in AAA at 2K Marin and Irrational Games, where he developed the acclaimed Minerva's Den expansion to Bioshock 2. He left in 2012 to form Fullbright, taking with him Johnnemann Nordhagen, a programmer, and Karla Zimonja. At Fullbright they created the game Gone Home, a narrative driven first person adventure game set in a house that centred around a queer love story and a female protagonist. Gone Home was highly acclaimed and perceived by games journalists as an early hit of the nascent indie movement and, along with Dear Esther, was one of the key works of the walking simulator genre. Steve Gaynor is probably one of the most high profile figures I approached who moved from AAA to indie, making his breaking out story of extreme interest to my thesis.

DAVE GILBERT

Current Position: Founder and Creative Director at Wadjet Eye Games
Principle Games: The Shivah (2006), *Blackwell Series* (2006-2014), *Gemini Rue* (2011), *Resonance* (2012), *Unavowed* (2018)
Location: New York, America
Outcome: Interviewed.
Profile: Dave Gilbert began as an independent developer of point and click adventure games in the proto-indie scene. Drawing on his own heritage, Gilbert's debut work The Shivah put the player in the unusual role of a Jewish Rabbi struggling with their faith. The game won the Monthly Adventure Game Studio 5th anniversary competition, emboldening Gilbert to found Wadjet Eye Games in order to publish his own future works including the long running Blackwell series. Despite remaining a small team along with his wife Janet Gilbert and a single artist, Ben Chandler, Gilbert utilised his studio's rising reputation by moving into publishing, releasing other games in the pixel art adventure genre as the genre started going through something of a renaissance, including Primordial in 2012 by Wormwood Studios. Gilbert's centrality in the re-emergence of the narrative driven graphical point and click adventure genre and his unusual status as an indie-cum-publisher makes him an important mediator in the growing indie sector.

DMITRY GLUKHOVSKY

Current Position: Independent writer
Principle Games: *Metro 2033* (2010), *Metro Last Light* (2013)
Location: Russia
Outcome: Direct email given by Dmitry's publisher Ksenia Papazova. No response
Profile: Dmitry Glukhovsky is most famous for his dystopian Sci-fi novel Metro 2033 and several follow ups. It was self-published in serialised form on his own website in 2002 and was famously written collaboratively with the fan base. He later helped Ukrainian Studio 4A Games to adapt Metro 2033 into game form and wrote the story for follow up Metro: Last Light. Because the latter's story was too big he published it as the novel Metro: 2035. Glukhovsky would provide an interesting insight to the study as a novelist who helped adapt his own work into games, but also as a voice from Russia in an otherwise Western-centric industry.

AUSTIN GROSSMAN

Current Position: Writer, Arkane Studios
Principle Games: *System Shock* (1994), *Deus Ex* (2000), *Clive Barker's Undying* (2001), *Thief: Deadly Shadows* (2004), *Tomb Raider: Legend* (2006), *Dishonored* (2012)
Location: America
Outcome: No response.

Profile: Austin Grossman is a novelist and game designer from a family or novelists, poets and artists. His book Soon I Will Be Invincible was nominated for the 2007 John Sargent Sr. First Novel Prize. He is also a journalist having contributed to the Granta, the Wall Street Journal, and the New York Times. After applying to a classified ad in the Boston Globe in 1992 he began his games writing career at legendary Looking Glass Studios, where he worked on some important immersive sim games like System Shock and Deus Ex, a genre famed for bringing quality storytelling into AAA videogames. He has also worked for Crystal Dynamics on the Tomb Raider series, Ion Storm and Dreamworks Interactive. His work for Dishonored at Arkane Studios (a break off from Looking Glass Studios), received the 2012 BAFTA award for Best Game. He is currently Director of Game Design and Interactive Storytelling at Magic Leap. Having worked as a writer for some of the earliest important narrative games Grossman's experience as a games writer would provide an interesting insight on the industry.

MARK HAMILTON

Current Position: Writer, Fireproof Games
Principle Games: *The Room* (2012), *The Room Two* (2013), *The Room Three* (2015)
Location: America
Outcome: Responded positively but requested an email interview due to hearing problem, which did not fit my method.
Profile: Mark Hamilton was one of six founders of Fireproof Studios in Guildford, one of the hubs of the British games industry. They had all worked together on the racing game Burnout Paradise at Criterion Games, where they developed the idea of breaking away to form their own studio – another good example of the flow of developers leaving AAA to form indie studios in this period. The studio is known for its puzzle series The Room, inspired by escape rooms and featuring an enigmatic story told through notes and the environment.

AMY HENNIG

Current Position: Visceral Games (EA)
Principle Games: *Legacy of Kain: Soul Reaver* (1999), *Jak and Daxter* (2001), *Uncharted: Drake's Fortune* (2007), *Uncharted 2: Among Thieves* (2009), *Uncharted 3: Drake's Deception* (2011), *Uncharted 4: A Thief's End* (2016 - partial)
Location: America
Outcome: After moving through a series of PR people the trail grew cold.
Profile: Amy Hennig was formerly lead writer at Naughty Dog, a prestige second party studio making games exclusively for Sony. Here she was the high profile creator and writer of action-adventure series Uncharted, making her a rare highly known female lead at a major studio (and thus of interest to this thesis). She has won numerous awards for the Uncharted series, including two Writers Guild of America awards, and also worked on the studio's Jak and Daxter series. After leaving Naughty Dog under curious circumstances in 2014, Hennig joined Visceral Games, an EA studio, to develop a major new narrative driven Star Wars with fellow industry luminary Jade Raymond. Hennig is interesting for having helmed one of the most important prestige narrative videogames, but also because of her well documented view that a game's script is more important than its graphics.

JON INGOLD

Current Position: Narrative Director, Inkle
Principle Games: *Sorcery!* (2013), *80 Days* (2014)
Location: Cambridge, UK
Outcome: I caught up with him at EGX Rezzed and he politely refused to be interviewed.
Profile: Originally a secondary school teacher before becoming a lead designer at Sony Computer Entertainment. Over a decade he was an award-winning author of short stories and interactive

fiction and co-founded Inkle in 2011 with Joseph Humfrey. Inkle isn't a game studio so much as a platform for publishing games, a tool for creating interactive narratives that have included the award winning 80 Days. This development of a technological platform for creating stories makes Ingold of interest to this study.

RAMI ISMAIL

Current Position: Business and Development guy, Vlambeer
Principle Games: Ridiculous Fishing (2013), Luftrausers (2014), Nuclear Throne (2015)
Location: Utrecht, Holland
Outcome: No response
Profile: Rami Ismail is a vociferous speaker at countless conferences, a mentor and advocate for diversity in the games industry and has engaged in many outreach initiatives encouraging game development in the developing world or economically isolated nations. His speakers profile at Develop in 2015 states: "Rami travels around the world trying to find game development communities everywhere, and tries to connect them to help enable anyone around the world to make games." He also Developed presskit(), software to help independents promote themselves more easily. His public speaking and engagement makes him a prime contender as a leading industry theorist.

MEG JAYANTH

Current Position: Independent writer
Principle Games: *80 Days* (2014 – for Inkle), *Sunless Sea* (2015 – for Failbetter), *Horizon: Zero Dawn* (2017 – contributing writer for Guerrilla Games)
Location: UK
Outcome: No response
Profile: Meg Jayanth studied at Oxford University where she directed the Oxford Revue and then worked at the BBC in the department responsible for commissioning videogames. She has written on Sunless Sea by Failbetter, but her most famous work is 80 Days, which was nominated for a BAFTA and won a UK Writer's Guild award. This was a 750,000 word innovative interactive fiction on IOS that subversively reimagines Jules Verne's novel in a steampunk setting and critiques its colonialist assumptions and subtexts. She has also written for publications like The Guardian, especially on topics of diversity in the games industry and is interested in writing about under-represented cultures (she has a game called Samsara set in 1757 in Bengal), and her work against the normative structures of the industry makes her of interest to this thesis. She has recently founded a narrative game label called Red Queens along with journalist (and Gamergate victim) Leigh Alexander as a safe space for female creators.

DREW KARPYSHYN

Current Position: Former lead writer Bioware
Principle Games: *Star Wars: Knights of the Old Republic* (2003), *Jade Empire* (2005), *Baldur's Gate Franchise* (1998-2004), *Mass Effect 1&2* (2007-2010)
Location: America
Outcome: No Response
Profile: Drew Karpyshyn is a Canadian videogame writer and novelist who started in the games industry at Wizards of the Coast, before joining Bioware in 2000 wrote the scenario and majority of dialogue for KOTOR, was one of the lead writers on Jade Empire and worked on several games in the Baldur's Gate series (a property owned by his former studio) before he became lead writer for the celebrated Mass Effect series of science fiction RPGs. He left Bioware in 2015, and again in 2018 to pursue independent projects including his Chaos Born novels. As lead writer of Mass Effect 1&2,

two of the most important RPGs in the seventh generation of consoles, his career is of interest to this study.

GREG KASAVIN

Current Position: Creative director, writer and designer, Supergiant Games
Principle Games: Command & Conquer: Red Alert 3 (2008 - producer Under EA), Spec Ops: The Line (2012 - publishing producer under 2K)**,** Bastion (2011), Transistor (2014), Pyre (2017), Hades (2020)
Location: San Francisco, California, America.
Outcome: Interviewed
Profile: Greg Kasavin is a founder and lead writer at Supergiant Games, which since 2011 has regularly produced critically acclaimed and commercially successful indie games in a variety of genres but all with an innovative approach to storytelling, many of them employing narration in unconventional ways. Before this he was Editor in Chief of the major site of games journalism Gamespot for 10 years, before pivoting into the games industry proper working as a publisher in the AAA industry on the Command and Conquer series for EA and the influential narrative game Spec Ops: The Line, which he left before completion to found Supergiant. His experience of AAA, indie and games journalism makes him an interesting figure for the study.

ALEXIS KENNEDY

Current Position: Founder and Chief Narrative Officer at Failbetter Games, Founder of The Weather Factory
Principle Games: *Fallen London* (2009), *Sunless Sea* (2015), Cultist Simulator (2018)
Location: London, UK
Outcome: Recommended his colleague Chris Gardiner for interview (see above)
Profile: Alexis Kennedy founded Failbettercin 2009 with Paul Arendt to develop the long running online interactive fiction game Fallen London. As the studio grew, Kennedy reduced his writing duties to become Creative Director, but frustrated by the lack of hands on creativity he left the studio to found The Weather Factory in 2017 where he developed the H.P. Lovecraft inspired Cultist Simulator. In 2019 he was accused of inappropriate conduct by several female employees, the latest in a long line of such scandals in the games industry.

DION LAY

Current Position: Senior Writer at Creative Assembly
Principle Games: *Empire: Total War* (2009), *Napoleon: Total War* (2010), *Total War: Shogun 2* (2011), *Alien: Isolation* (2014), Halo Wars 2 (2017), *Total War: Three Kingdoms* (2019)
Location: Horsham, UK
Outcome: Interviewed
Profile: Dion Lay has been at AAA studio Creative Assembly, owned by Publisher Sega, for 17 years working his way to senior writer from the QA department. He has written extensively for the Total War series of strategic historical simulations but was invited to work as narrative designer on Alien: Isolation by Creative Director Alistair Hope due to his interest in the source material. Here he mediated between the small writing team and the level designers.

KEN LEVINE

Current Position: Creative Director at Irrational Games (2K)
Principle Games: *Thief: The Dark Project* (1998 - for Looking Glass Studios), *System Shock 2* (1999), *Freedom Force* (2002), *Bioshock* (2007), *Bioshock Infinite* (2013)
Location: Westwood, Massachusetts, America
Outcome: Heard back from PR who told me Levine had his head down with his new project.

Profile: Ken Levine started off in legendary Looking Glass Studios where he worked on Thief: The Dark Project. He co-founded Irrational Games in 1997 with two other former Looking Glass employees, where he developed Bioshock series, the first game of which in particular is so celebrated for its narrative (which featured a critique of Randian Objectivism) that he was named one of the storytellers of the decade by Game Informer and has been the recipient of a Golden Joystick lifetime achievement award. In 2017 Irrational Games was down-sized and rebranded as a microstudio called Ghost Story Games with Levine heading up a project he has described as being driven by 'narrative Lego', an innovative attempt to explore procedural storytelling techniques. His 2008 GDC talk on Bioshock here he discusses 'push and pull narratives' is a key piece of industry theorising, and his insights in storytelling within the medium makes him an important potential interviewee.

HIDETAKA MIYAZAKI

Current Position: President at From Software
Principle Games: *Demon's Souls* (2009), *Dark Souls* (2011), *Dark Souls 2* (2014 – as advisor), *Bloodborne* (2015), *Dark Souls 3* (2016), *Sekiro: Shadows Die Twice* (2019)
Location: Japan
Outcome: No Response
Profile: Hidetaka Miyazaki is president of From Soft, a Japanese AAA studio who over the course of the 2010s became a household name in the West for its Dark Souls series of games, which, along with several other stylistically similar works like Bloodborne and Sekiro, spawned an entire genre known as 'Souls likes'. It is perhaps impossible to overstate the importance of this series on game design over the last decade as it continues to influence AAA and indie developers of all stripes for a variety of reasons including: its approach to difficulty, its enigmatic approach to environmental storytelling, its approach to world building, and its nuanced combat mechanics. The strength of the Dark Souls brand saw him promoted to the company's president in 2014. The fact that the Souls series is one of the most influential franchises in modern videogames, makes Miyazaki a key potential interview candidate, and his base in Japan make him a good counter point to the Western-centric focus of the other subjects.

RYAN PAYTON

Current Position: Founder and Creative director at Camoflaj
Principle Games: *Metal Gear Solid: Portable Ops* (2006), *Metal gear Solid 4* (2008), *Halo 4* (2012), *République* (2013-2016)
Location: Brighton, UK
Outcome: Interviewed
Profile: Payton entered the games industry whilst teaching in Japan after he had the opportunity to interview Hideo Kojima at a games conference and Kojima overheard him speaking in Japanese with his translator. Payton worked on two major titles in the Metal Gear Solid series as a producer helping to localise the game for the American audience (and particularly overseeing voice over recording). He moved to 343 industries to work as a producer on Halo 4, giving him experience on two of gaming's most commercially successful franchises. After an incident at work Payton decided to leave to work on his own projects and launched a Kickstarter to fund the dystopian stealth game for IOS, République, which barely got funded. His movement between AAA and indie and the themes his new game shares with his former works makes him of interest to this study.

DAN PINCHBECK

Current Position: Founder and Creative Director, The Chinese Room
Principle Games: *Dear Esther* (2008), *Amnesia: A Machine for Pigs* (2013), *Everybody's Gone to the Rapture* (2015)

Location: Brighton, UK
Outcome: Interviewed at his office in Brighton
Profile: Dan Pinchbeck is Creative Director and joint Studio Head at the award-winning The Chinese Room, named for John Searle's classic AI thought experiment. After a string of experimental mods, they released their first game, Dear Esther in 2012, which is widely regarded as kick-starting the sub-genre of FPS games often referred to as 'walking simulators'. The game originally started as an Arts and Humanities Research Council funded academic research project at University of Portsmouth School of Creative Technologies, with the intention of developing links between university research cultures and the games industry and demonstrating that the University could be a site of creative game development. The game gathered international acclaim and a string of awards. It was also a commercial hit, smashing the sales ceiling for art games, selling over a million units since launch. In 2017 the studio was forced to lay off its staff of 8 and downsize, before being acquired by Sumo Digital in 2018 for £2.2million. Pinchbeck's trajectory from academia to games industry is particularly interesting in light of my focus on industry theorising.

LUCAS POPE

Current Position: Independent designer
Principle Games: *Papers, Please* (2013), *Return of the Obra Dinn* (2018)
Location: Saitama, Japan
Outcome: Recommended by Tom Rawlings. Interviewed
Profile: Lucas Pope is an American-born independent developer who lives and works in Saitama, Japan. He started off his games career making mods for Quake, founding his own studio Ratloop, before working in AAA development specifically at Naughty Dog Santa Monica Studio during Uncharted 1&2. After leaving AAA development he made several experimental games with his wife Keiko Ishizaka. His breakthrough was the acclaimed Papers Please, which was embraced as part of the emerging 'empathy games' movement. His follow up, The Return of the Obra Dinn, saw the player in the role of an insurance claims investigator trying to deduce the fates of 60 souls aboard an East India Company ship by using an innovative time-travel mechanic. Both these games won the Seumas McNally Grand Prize as part of the Independent Games Festival. These games solidified Pope's interest in making compelling and emotional game mechanics out of seemingly mundane bureaucratic activities, which makes his perspective highly interesting to this project.

RHIANNA PRATCHETT

Current Position: Freelance Writer
Principle Games: *Heavenly Sword* (2007), *Overlord* (2007), *Mirror's Edge* (2008), *Tomb Raider* (2013), *Rise of the Tomb Raider* (2015)
Location: UK
Outcome: Recommended by Greg Kasavin. Interviewed.
Profile: The daughter of beloved fantasy author Terry Pratchett, Rhianna Pratchett has managed to carve a career for herself as one of the most respected and well-known writers in the games industry. Her route into the games industry was as a journalist for PC Zone (later section editor) and also wrote for other outlets including the Guardian. After writing for Ninja Theory's PlayStation launch title Heavenly Sword and EA's cult dystopian parkour action game Mirror's Edge, Pratchett landed the most ambitious writing role in the industry: rebooting videogame icon Lara Croft for Crystal Dynamics. She has written some of the most complex and believable female action protagonists in the medium and has spoken regularly on the challenges of writing for interactive media and on issues of diversity in the games industry for a variety of publications and key industry conferences like GDC and Develop: Brighton. She was named one of the 100 most influential women in videogames. Her experience and advocacy make her an important potential interviewee.

ZOE QUINN

Current Position: Independent designer
Principle Games: Depression Quest (2013)
Location: Canada
Outcome: No response
Profile: Their most prominent work, Depression Quest, is a Twine text adventure following someone coping with depression, which simulates the debilitating nature of the illness by deliberately limiting the player's choices. Zoe Quinn was the initial victim of the Gamergate harassment campaign in 2014, after their ex-boyfriend accused them of sleeping with games journalists for positive reviews (which was quickly discredited), and ever since they have been an outspoken advocate for gender equity and queer representation in the games industry, including setting up support network for online harassment Crash Override (also the name of the book they published on their experiences) and has spoken at the United Nations with fellow advocate Anita Sarkeesian on the issue of protecting marginalised groups on the internet.

CHRIS REMO

Current Position: Developer, Campo Santo
Principle Games: *The Cave* (2013 - co-writer with Ron Gilbert), *Firewatch* (2016)
Location: San Francisco, California
Outcome: No Response
Profile: Formerly a journalist for Adventure Gamers, Idle Thumbs, an Editor in Chief at Shacknews and Editor at Large for Gamasutra (until 2010), Chris Remo is a host of the podcast Idle Thumbs and Important if True. He is also a videogame composer (Thirty Flights of Loving, Gone Home, Spacebase DF-9). He was a former community manager at Irrational Games and Double Fine Productions but left to form Campo Santo with fellow Idle Thumbs hosts Jake Rodkin and Sean Vanaman.

TOMAS RAWLINGS

Current Position: Design & Production Director at Auroch Digital (also acts as a consultant)
Principle Games: *Endgame: Syria* (2012), *Narco Guerra* (2013*), Ballot Bots* (2015 - election game for BBC), *Mars Horizon* (2019)
Location: Bristol, UK
Outcome: Interviewed.
Profile: Tomas Rawlings is Co-founder of the Bristol Games Hub and named in Bristol's Arts & Culture Power List. He developed the 'Game the News' initiative, a 'serious games' initiative that attempts to quickly respond to current news, using games as a means of understanding complex socio-political events. He has worked on major IPs such as Star Wars (Star Wars: The Battle for Hoth) and Lovecraft (Call of Cthulhu: The Wasted Land). I have attended conferences with Tom (Mapping the Collective in Bristol) and seen his keynote at the British Library Playable Beowulf conference. Although I did not use his interview he was instrumental in allowing me to contact several other interviewees.

TIM SCHAFER

Current Position: Creative Director at Double Fine
Principle Games: *The Secret of Monkey Island* (1990), *Maniac Mansion: The Day of the Tentacle* (1993), *Full Throttle* (1995), *Grim Fandango* (1998), *Psychonauts* (2005), *Brutal Legend* (2009), Broken Age (2014)
Location: San Francisco, America
Outcome: No response
Profile: Tim Schafer is a veteran of the videogame industry and a beloved household name, best remembered for his writing for several iconic point and click adventure games for Lucas Arts

including The Monkey Island Series and Grim Fandango. He founded Double Fine in 2000, and the studio is famous for open approach to development and its yearly creative game jam Amnesia Fortnight (where everyone in the studio gets a chance to pitch and develop a game), from which many of the studio's games are born. The funding of *Broken Age* opened the floodgates for the use of Kickstarter as an alternative means to game financing, and the resulting documentary of the process by 2 Player Productions gave an unparalleled level of transparency and access to the process of game development. In an interview at Game Developers Conference in 2003, Schafer stated that he strives for integrating story into the gameplay, making him of interest to this study.

EMILY SHORT

Current Position: Independent developer of Interactive fiction
Principle Games: *Galatea* (2000), *Sunless Seas* (2015 - contributing writer), *Sunless Skies* (2019 - contributing writer), *Signs of the Sojouner* (2020), *Where the Water Tastes Like Wine* (2018)
Location: America
Outcome:
Profile: Emily Short is a leading name in interactive fiction movement, and the author of several experimental narratives, most notably Galatea which plays with natural language processing to create a believable non player character (NPC) with which the player can converse. She speaks regularly on the topic of interactive fiction and her blog has many fascinating technical articles on the topic. She has also written for several recent indie games including *Signs of the Sojouner*, *Where the Water Tastes Like Wine.* In 2020 she was made Creative Director at Failbetter Games, a studio whose games she has regularly contributed to as a freelance writer. Her perspective on the extremely narrative driven interactive fiction genre, which can be seen as a kind of proto indie movement, makes her input of interest to this thesis.

RANDY SMITH

Current Position: Co-owner and Creative Director at Tiger Style
Principle Games: *Thief: The Dark Project* (1998), *Thief II: The Metal Age* (2000), *Spider: The Secret of Bryce Manor (*2009), *Waking Mars* (2012), *Spider: Rite of the Shrouded Moon* (2015)
Location: America
Outcome: Responded positively but could not settle on a date
Profile: Randy Smith formerly worked in AAA for 10 years as a designer and lead on the Thief series for looking Glass Studios and ION Storm, as well as on a cancelled Steven Spielberg collaboration at EA, and was also a consultant for Ubisoft, and Arkane Studios. After founding Tiger Style Games, he made Spider: The Secret of Bryce Manor, an innovative game for IOS where the player took on the role of a spider building webs in an old mansion that won IGF Best Mobile Game in 2009 and featured an enigmatic, environmental story. Between 2013-2017 he had a monthly column called 'the possibility space' at the preeminent British games magazine Edge, which makes him a prime industry theorist.

JAMES SWALLOW

Current Position: Independent author and games writer
Principle Games: *Deus Ex: Human Revolution* (2011), *Fable: The Journey* (2012), *Deus Ex: Mankind Divided* (2016), *The Division 2* (2019)
Location: London, UK
Outcome: No response
Profile: James Swallow is a BAFTA nominee and a New York Times, Sunday Times and Amazon #1 best-selling author of fantasy and science-fiction novels, frequently working with IP in the Warhammer, Doctor Who and Star Trek universes. He has also written extensively for some major

AAA videogames, most notably several entries in the well-respected Deus Ex series. His work as a transmedia author make him an potential interesting perspective on this study.

SEAN VANAMAN

Current Position: Founder of Campo Santos.
Principle Games: *Puzzle Agent 2* (2011), *Walking Dead Series 1* (2012), *Firewatch* (2016), *Half Life: Alyx* (2020), In The Valley of Gods (forthcoming).
Location: San Francisco, California
Outcome: Recommended by Tom Rawlings. Interviewed
Profile: Sean Vanaman started his career as associate creative development producer at Disney Interactive where he worked on Epic Mickey. Whilst working a**s a** designer and writer at Telltale Games on the immensely successful Walking Dead series (which won over 80 game of the year awards), which launched the studio as a household name and took the point and click adventure genre into a new direction. He left Telltale with colleague Jake Rodkin in 2013 to found Campo Santo, where he wrote the innovative system driven narrative walking simulator Firewatch. He co-hosts the Idle Thumbs podcast with colleagues Jake Rodkin and Chris Remo. After Campo Santo was purchased by Valve in 2018 Vanaman also wrote for Half Life: Alyx, whilst still working on his follow up game *In The Valley of Gods*.

MAC WALTERS

Current Position: Lead writer at Bioware
Principle Games: *Mass Effect Andromeda* (2017)
Location: Edmonton, Canada
Outcome: No response
Profile: Mac Walters is a prominent lead writer at RPG studio Bioware, particularly noted for taking the reigns of the ill-fated Mass Effect Andromeda as Director following several high-profile industry exoduses. Would be a potentially interesting interviewee for working on a troubled production during a major studio realignment.

WALT WILLIAMS

Current Position: Lead writer and narrative designer, Yager (2K)
Principle Games: *Bioshock 2* (2007 - as story editor), *Mafia 2* (2010 - additional writing), *Spec Ops the Line* (2012), *The Darkness 2* (2012), *Borderlands: The Pre-Sequel* (2014), *Sid Meier's Civilisation: Beyond Earth* (2014), *Star Wars Battlefront II* (2017)
Location: America
Outcome: No response
Profile: Walt Williams is a veteran AAA game writer with a string of important titles on his CV, including co-writing critically acclaimed Spec Ops: The Line with Richard Pearson, a FPS that subverted the genre. He departed 2K Games in September 2014. He wrote the book Significant Zero, part memoir of his career as a games author and part reflection on the nature of writing for games, making him an interesting industry theorist and thus of relevance to this thesis.

CATHERINE WOOLLEY

Current Position: Media Molecule
Principle Games: *Harry Potter and the Deathly Hallows* (2010 – For EA Bright Lights), *Alien: Isolation* (2014 – for Cretaive Assembly), *So Let Us Melt* (2017 – for The Chinese Room), *Dreams* (2020 – for Media Molecule)
Location: UK
Outcome: Interviewed

Profile: Catherine Woolley has worked in game design for over a decade, starting out with EA Bright Light on Harry Potter and the Deathly Hallows and the Flips series At Creative Assembly Catherine Woolley was a Level Designer on Alien: Isolation. In 2015 she moved to The Chinese Room (where she worked on So Let Us Melt for Google Daydream VR) pursuing a desire to work on narrative driven indie games, but when the studio down-sized in 2017 she moved to Media Molecule where she worked as a designer on Dreams. She was named one of the top 100 most influential women in games by MCV in 2013, 2015 and 2019 and is a STEM ambassador, Women in Games ambassador and a representative for BAFTA Young Game Designers. Her experience as a level designer, responsible for embedding narrative in the spaces of videogame play, make her of interest to this study.

DAVEY WREDEN

Current Position: Independent Designer and Founder of Everything Unlimited Ltd.
Principle Games: *The Stanley Parable* (2011), *The Beginner's Guide* (2015)
Location: Austin, Texas, America
Outcome: No response
Profile: Davey Wreden created the highly acclaimed, highly reflexive The Stanley Parable along with William Pugh using the Half Life Source Engine. His follow up, the even more reflexive game The Beginner's Guide, was a part meditation on his own withdrawal due to depression, but also an intense mediation on the nature creativity. In 2019 his studio Everything Unlimited Ltd. started gearing up for a new project. The highly reflexive nature of Wreden's games make him a prime industry theorist, but one who reflects on the medium through games themselves, making him of interest to this study.

Appendix B: Initial list of repeating ideas

This is a full list of repeating ideas based on the second step of coding based on Auerbach and Silverstein's method. They were gleaned through reading through the relevant text. They have been organised into the thematic categories for convenience.

Movement through the industry

Career trajectories/mobility
Motivation to found studio
Explanation of their role
No time for reflection
Route to market

Production environment

Team composition
Voice Acting
Description of process
Creative culture/organisation
Production environment

Networks of collaboration

Collaboration with others
Creativity dispersed
Perspective on the pipeline
Tension between designing and publishing
Iterative process

Having a clear vision

Having a clear vision
Responsibility of the writer
Role of an editor
Complexity and flexibility
Creative disagreements

Management of ideas

Quality control process
Planning/documentation
Documentation (management of data)
Flow of ideas

Factors that influence and constrain creativity

Constraints of setting/narrative
Constraints in tools
Constraint in platforms
Constraints of marketplace
Constraints of franchise
Gameplay as constraint
Power fantasy as constraint
Resource constraints
Constraining role of Genre

Comparison to other games

Comparison to other games
Reflection on other games
Influence of source material
Influence of other media
Influence of technology
Pressure to do something new
Comparison to other media
Attitude to cutscene
Sources and influences

Spatial literacy

Frustration with genre
Structure of game space (mission design)
Realistic interaction with environment
Mission design
Environmental pedagogy
Environmental storytelling

Relation of gameplay and narrative

Solving narrative problems
Characterisation
Linearity and non-linearity
Relation of Gameplay and Narrative
Ludology narratology
Challenge of merging gameplay and narrative
Placing story over gameplay
Building story from mechanics
Technology and procedural narrative

Procedural vs authored

Procedural vs authored
Emergent vs scripted
Specific structure of story
What makes for good narrative?
What Makes for bad narrative?

Player experience

Fitting Player to Story
Contract between designer and player
Immersion and presence
Interfacing with public
Experiential storytelling

Subverting expectations

Empowerment/disempowerment
Subverting expectations

Regarding larger cultural shifts

Limiting definition of a game
Games as a storytelling medium
Change in production and consumption cultures
The purpose of Games

Player interpretation

Interpretation of FPS
Player Interpretation
Nature of storytelling
Dissonance
Ambiguity
Attention to detail
Mood and tone
Internal consistency
Minimalism
Narrative Redundancy

Player relationship to avatar

Player relationship to avatar
Encouraging player behaviour
Type of protagonist

Relation between indie and AAA

Creative freedom
Commercial vs independent
Small Team/Large Team
Significance of indie scene
Indie vs commercial demands
Taking creative risks

Changing attitudes to games as a media

Attitudes to game history
Relation to game history
Changing attitudes to games as a media

New Types of story

New types of stories
New Technology and accessibility
Problems with new developments
Diversity in storytelling

Orphans and Unused

From theory to practice (links between industry and academia)
Theory outside academia
Art school as site of exchange
Death and rebirth of genres
Games Literacy
Relation between press and industry

Modernising the adventure genre
3D vs 2D space
Finding solutions outside combat
Diversity of approaches

Appendix C: Repeating ideas organised into final themes and theoretical constructs

This appendix contains a complete list of repeating ideas arranged into final themes, which are in turn organised into thematic constructs as per the methods proposed by Carl F. Auerbach and Louise B. Silverstein (2003) *Qualitative Data: An Introduction to Coding and Analyzing*. Each one is explained (text in italics) in terms of what it was coded for and each textual unit is ascribed a code in red, squared brackets to indicate the speaker (a final list of interviewees follows to explain the codes and see Appendix A for detailed profiles). This system is to allow for convenient cross referencing with quotes given in the text of the thesis. Proper nouns (companies, individuals, game titles and other software or organisations) have been placed in bold for ease of identification and to demonstrate the density of links in the game industry networks analysed.

Legend: Final List of Interviewees
[CG] Chris Gardiner, Narrative Director at Failbetter
[CW] Catherine Woolley, Level Designer at Creative Assembly
[DG] Dave Gilbert, Founder and Creative Director at Wadjet Eye Games
[DL] Dion Lay, Narrative Designer and Senior Writer at Creative Assembly
[DP] Dan Pinchbeck, Founder and Creative Director at The Chinese Room
[ES] Emily Short, Independent Developer
[GK] Greg Kasavin, Founder and Creative Director at Supergiant Games
[LP] Lucas Pope, Independent Developer
[RP] Ryan Payton, Founder and Creative Director at Camoflaj
[RPR] Rhianna Pratchett, Noted Freelance Writer
[SG] Steve Gaynor, Founder and Creative Director at Fullbright
[SV] Sean Vanaman, Founder and Narrative Designer at Campo Santo

Note: All interviews conducted over the summer of 2015 via Skype.

REGARDING ROLES AND ORGANISATION

This theoretical construct organises several themes concerning the individual research participant within the larger structure of the studio, their perception of the pipeline, and their trajectory through the industry. It also includes industry theorising about the nature of collaboration and leadership in game development.

Movement through industry

Reflection on personal background and employment history, including the experience gained in prior roles, and the interaction with different industry sites to bring project to fruition. Also includes the release of the product and its movement in distribution channels in the post-production phase.

[CG1] I knew **Alexis [Kennedy]** personally, so when he was starting **Fallen London** he needed chunks of extra content written… I was bought on fulltime because there was a lot of that to write and they needed an extra writer. So I became a fulltime **Failbetter** employee.

[CW58.1] But with me moving to **The Chinese Room** I'm like, "yeah I care about narrative. I want to be deeply involved in storytelling."

[DL2] So on **Alien** it was **Dan Abnett** who wrote the story and worked on the game, and then it was me and **Will Porter** did most of the gameplay stuff. So yeah, we all worked together really. I'm the only one at **CA [Creative Assembly]** at the moment.

[DL4] I worked on **Empire**, **Napoleon** – I'm looking at my awards – and **Shogun 2**. It's very different. That was very much just writing and, because of the nature of those games, they're less about the narrative, that was just writing logs and VO and stuff like that, where **Alien** – that was my first job as a narrative designer – that was very different, that was obviously much more story led and I got asked to work on it because **Al Hope**, who is the creative director at **CA**, he knew I loved horror so he wanted me to look at **Alien** and I jumped at the chance.

[DP11] We were championed by a then journalist now PR guy called **Lewis Denby**, who now works for a PR company called **Beefjack**, and he was very interested in this kind of stuff.

[DP12] Mainly we launched it on **moddb**, which at that point was an incredibly strong vibrant community, which was pre the indie explosion, so If there was any kind of small team, outlying, edge case stuff being made it was being made by the mod community.

[DP14] So I think by the time we commercialised it there was a lot of buzz around **Rob [Briscoe**, environment artist], because he'd come from **Mirror's Edge** and it was really exciting in terms of what he was doing with **Source Engine**, **Jess [Curry]**'s music had already grabbed people and was being circulated hugely around, and not just around that community but other online game communities, as being something really special, and it already had a bit of a notoriety as a mod.

[DP17] it was originally supposed to have been released by the university rather than independently, and we kind of reckoned that if we were working on the basis that we made… if we sold 20,000 units lifetime, that would pay, just, for the time which **Rob** and **Jess** had put into it, so that was the target and I think it took half an hour to do that.

[GK4] The other part that I think has helped me a lot is as part of my job at **Gamespot**… Websites in the end are software much like games. And so I was working with cross-disciplinary teams of artists and programmers and so on.

[GK12] My role was as a producer on the publishing side [for **Yager**], so I was like kind of the liaison between the publisher and the developer and I worked very closely with the writers on the team and was involved in like some of the voice recording and even contributed some aspects of writing and stuff like that.

[LP1] But one of the nice things about being indie like this is that it doesn't really matter where we live, because I can work from anywhere.

[RP1] I worked on a lot of games there but primarily in the **Metal Gear Solid** series it was **Metal Gear Solid: Portable Ops** and **Metal Gear Solid 4**.

[RP5] My three years at **Microsoft** were very seminal and really helped me in understanding like who I was as a creator and as a producer of games, more so than even **Metal Gear** was, I think, because I was actually for the majority of my time at **Microsoft** I was actually creative director on **Halo 4** … for the first two years or so I was just heavily invested in really pushing forward game narrative and did a lot of research and thinking and we hired a lot of smart people and that was very transformative for me.

[RP14] we have an amazing writer for the game. He wrote the vast majority of the game. His name is **Brendan Murphy** and he came from a Hollywood background, he used to work on films down in California and he never worked on a game before and he had never played **Metal Gear**.

[RP23] I was a young creative director on a huge franchise, **Halo**. I worked really hard and despite all my efforts... through you know some lack of political tact on my part and for other reasons, I was demoted and kind of put in a corner and I had about nine months to really think hard about, 'do I want to stay here in this kind of a really extremely reduced role and have to see all these people in the hallway that I had hired and I was their boss's boss, you know for so long.' ... because at that point I had been working for about six years on other people's IP, other company's IP, that while some of my favorite IP in the world, like **Metal Gear** and **Halo**, I really felt like it was time for me to stop just borrowing other people's ideas or universes and really try to see if I can create one myself.

[RP24] Long story short I left **Microsoft** I liquidated all my stock I liquidated my 401(K), all my retirement, and started this company and this really started with two people, then three people and eventually just continued to grow... I wrote about our studio, but the most recent one is in **gameindustry.biz** about staying alive from a financial perspective these past four years.

[RPR6] I maybe had four or five visits during **Rise of the Tomb Raider** that were between one and two weeks long. Obviously they're a regular... I was in regular, almost daily contact when it was at its heaviest period with the narrative team

[RPR7] I give up power for freedom basically, working like this. So I don't have the power that I would have if I was on site to kind of guide things on a day to day basis, but I do have the freedom to take other projects and work on other mediums and just generally strengthen myself as a writer.

[SV2] Most of the core is staying around for future games, but were going to mix things up a little bit I think, just because people's ambitions change and I'm sure people will go work on other stuff and come back. It's sort of the way we structured the studio was to be able to not carry a giant staff always,

[SV45] Doing all the stuff you need to do to like get the game you just worked on completely done and on all the platforms before you move on. We're going to **Pax** and stuff like that, and I've never done that.

Production Environment
Reflections on role or position within the larger team and workflow, but also reflection on or expressions of the specific culture within the studio.

[CG2] As the company's grown and **Alexis'** duties increased he wasn't able to keep being head writer in addition with everything else, so when he became creative director I took over there head writing. Which means I still do some writing but I'm responsible for deciding what gets written and to keep everything to the quality standards of **Fallen London** and contracting freelancers and steering what goes into **Fallen London** and **Zubmariner**.

[CW1] I wouldn't say I was one of the main level designers, because there are quite a few of us. I had two pretty big levels... For those missions I knew I kind of had to have the android for the main bit of Seegson comms and the alien for the main bit of ['quarantine'], so it was kind of just figuring out what to add around them.

[DG14] Janet is doing the porting. She's not coding the games, I'm doing that. I mean the core team is me, **Janet [Gilbert]** and **Ben [Chandler]**. So those are the only full timers. We had a full-time designer for a while but that ended. Other than that it's like some contractors - we hire people to do the music, to do the portrait art, sound effects. And of course you know we don't write all the games

that we release. We work with other developers as well, we've published others. So they usually have their own teams.

[DL6] They were already looking for an outside writer to do the main story and we came upon **Dan Abnett**. Me and Al and a few other leads worked with Dan on the story, so he wrote everything but we were kind of making sure it fitted the game that we wanted to make.

[DL7] **Dan** kind of gave us a basic story and then the next process was to outline it into a game, so we know we want to have this amount of missions, we know we want this kind of gameplay, we also knew the things we couldn't do, we weren't going to make a branching narrative or anything, it was going to be quite linear.

[DP3] But even now I don't tend to call myself a game designer I tend to think of myself as being a creative director, like I don't do a lot of the detailed systems work that I think is the real thing of game design.

[DP4] Yeah, I do level design. So for the game we're working on at the moment, **Total Dark**, I initially wrote the whole thing as a paper based roleplaying game so I came up with all the systems, I worked with **Andrew [Crawshaw**, lead designer]on all of those, I don't tend to, mainly out of time more than anything else, I don't tend to do the scripting and nuts and bolts event flow anymore.

[GK47] So I think that for me it's one of those moments of recognizing what having a narrative that's connected to the mechanics and the play experience, what the impact that that can have… I think you just have to have a development environment where you can recognize those opportunities and then do something about it.

[LP2] I mean it's kind of like you said, it's like for some reason I think academia requires too much formalism, whereas when you get into a production environment, especially with games and design, it's so much in flux all the time. And a lot of times you just get lucky.

[RP46] You know I didn't really think about this until now but that might actually just be like symbolic of how we were feeling about the game after working on it for four years. We just wanted to blow it all up and watch the world burn, just like Zeiger.

[RPR23] Even if you don't consider yourself a narrative designer, you really need to understand about … how games are designed. Because then you know how stories are put together, and the mechanics of the world, and maybe what some of the designers will be fighting battles for… because it's dependent on things like level design, positioning, and mechanics, and camera, and all sorts of stuff. And you've got to know how the player is going to experience the story.

Networks of Collaboration
Discussion of or reflection on games as a collaborative process and processes put in place to facilitate this, or reflection on the production pipeline and relationship to other developers.

[CG6] We have a **Slack** content channel which all the writing staff and freelancers are in, where we can discuss that stuff. So we try to keep that information, discussions about that in public so it gradually… it's too much for one person to remember but at least it percolates up and some of it sticks and rings bells.

[CG13] The lines aren't clear and it's always resolved through conversation and gradually, as these conversations go on, everyone's understanding of what fits **Fallen London** kind of starts to coalesce,

but because we use so many freelancers there are a lot of those conversations. Generally they get adjusted in the creative process.

[CG15] But we also want freelancers and writers to bring their own voices. A good example is the Empire of Hands in **Sunless Sea**, which is a very popular island, which was written by **Richard Cobbett**, who is an expert on **point and click adventures** and it's kind of him doing a point and click adventure in a text format.

[CG16] It is very collaborative. It's not that two people will sit and write something together, but we have these recurring points where, as I said, the head writer and the writer will discuss it and make corrections. Also our content QA, the editing, we have an in house editor who's excellent… What something looks like before **Olivia** has been at it and what it looks like after is often very, very different. I think every company that does narrative needs editors, a good editor is just incredible.

[CG19] So you can have the writer, the person its pitched to (who also does reviews), design QA, content QA… so you have four or five people involved in every single piece of content. So the writer writes, but it's not in vacuum and it's not like cowriters where one person writes one chapter and another writes the other, but I still think it's a very collaborative process.

[CG25] When we started using freelancers in **Fallen London** there was immediately a kind of friction in getting them to fit more smoothly into all the existing content… So writing for **Fallen London** and Writing for **Sunless Sea**, although mechanically very similar – the tools we're using are practically identical – creatively it's quite different.

[CG30] Yeah, **Paul [Arendt]** our art director, who did every single piece of art for **Sunless Sea**, is really good at that. Again it's a very collaborative process where we put him and the writer of a particular piece together in a channel and they talk about what the port looks like. Paul will often look at the content and often the content will change to represent what Paul's done.

[CW5] It was always trying to come up with a way for the player to encounter the alien and I can't even remember how I came up with Kuhlman [an NPC], I imagine it was working with **Dion.**

[CW7] Seegson comms I didn't have from the start, that was another designer who was originally laying it out, whereas the hospital level, 'Quarantine' was kind of… I got it when it was really early white box, which for us was **Sketch Up**. So we used **Sketch Up** to do early versions of our levels, and when I got it, it was kind of like a maze, so I completely changed it around.

[CW9] So I ended up grabbing a bit of it, moving it somewhere else… I suppose, modular design, because we could easily pick up bits and move them around and snap them into place, show it to an artist and be like: "Ok we've played it in this state now, we think this will work better because the player will go through the level in the correct way we want or we've removed a loop from here because it completely broke how the narrative would work with learning things from Kuhlman".

[CW10] There was constant iteration with the artist to make the levels how we felt they would work… So it was a really nice experience working with artists really collaboratively. So I sat next to my artist for both levels actually, so it made the process nice and quick.

[CW18] So there was always a lot of back and forth, because generally we'd try to put in as much of the dialogue as possible and then run it through **Dion** and **Will** to see if they felt we were using the most important parts.

[CW22] We had different levels of priority on dialogue, as well as combat dialogue. I'm pretty sure we implemented, or we had the audio team implement, that if dynamic dialogue was trying to play in combat that it wouldn't.

[CW24] **Dion [Lay]** wouldn't have seen it from that side. He would have written everything up and put it into … I suppose it was kind of like a spreadsheet with all the strings for the dialogue. He would have seen it from that side, the script writing side, whereas I had it more from the implementation side. I'd be working with the audio designers who were working with **Wwise** to make sure I was using the correct priorities of things.

[CW36] We had really good tools for the game so we were able to have multiple people working on the same environment, similar to how **Unreal 4** works, although we were before **Unreal 4**, we had an environment level and then missions within that level, so you could create a new mission and you'd be working in the same environment but you wouldn't be touching anyone's work, unless you then needed to go into the environment section… It was a nice system, and I'd like to think it would fit together, but I'm not sure how much of it would.

[DG15] So usually what I do is that I write something and then I try to kind of prototype it. I do like a very sketchy placeholder art... like stick figures and **MS Paint** backgrounds, just to see if it works, just to see if it's fun and if it makes sense, and more often than not it doesn't. So I'll redo it just using placeholder art just to get it to the point where I'm like 'okay this works.' And then I tell **Ben** 'Okay this is what we need, like here's my placeholder art, make it look good.' So we can go from there, so then I reprogram the whole thing using the new art assets and get it done.

[DG16] And often by determining how that works I'll learn how... I kind of end up redesigning chunks of story to kind of fit that. And it kind of... There's a lot of back and forth and changing things and often it makes it... as frustrating as it is for some people I work with, often it makes a much better game. I know in **Blackwell Deception** I changed the ending about three times because it just wasn't working.

[DG17] No, usually I try not to let **Ben** do art until I have it set in my head, which can be a challenge because he's full time so I want him... I don't want him to be sitting around doing nothing, so I always try to be ahead of him in terms of design

[DG39] Even if I'm not involved with the writing I do try to kind of guide the developers to make it better just based on my own experience. Some developers are cool with that. Some aren't.

[DL3] Along with the leads and the directors and stuff. So it's always very collaborative. You kind of get told what people want and then you write that, work together and change stuff, and adapt to the gameplay as well.

[DL8] Then **Dan** and I looked at the cinematics and scoped those out to figure out the main beats of the story. Then what would happen is we'd give the level designers the bones of the story and they would know what would be fun, what kind of gameplay they wanted, then we would kind of fill it in. I know I'm rambling a bit, I'm trying to figure out how it actually works.

[DL10] When you do a game like **Alien** you spend a lot of time talking to the mission designers and compromising on stuff sometimes – not compromising but cooperating. You know sometimes you want to tell something that isn't that important and it's getting in the way of game play, so you drop it or you find a better way to do it.

[DL13] I'm trying to remember who. It might have even been art. I don't want to say who it is in case I'm wrong. I know that the mission designer **James**… that's the one where you walk through and they're all lined up… I think that was James' idea, having that bit when you walk through them and they don't do anything and then they suddenly react.

[DL14] All of the environment [artist] guys as well, they just have such specific ideas about telling stories. It always looks great, but they'll put in things you haven't thought about like, "I've put in these tools because this guy was working on this before the alien came through," and that's excellent. Then sometimes you end up writing to that.

[DL15] You very quickly realised that the best thing is to just get people together – get the artist with a mission designer, because when you're working on a mission you tend to have an artist assigned to it and a level designer assigned to it so they really own it and really know it…And you kind of kick around ideas and you always end up with something loads better and loads faster than just doing it by yourself.

[DL16] I think one of the artists saw that and basically put in a human being with a magazine shoved down their throat. It was really funny because you kind of… it was like Will had set up the joke and the artist did the punchline.

[DL30] Also when we worked with the actors, it's the first time I've been at the recording session and I learned loads, because you find that sometimes you get a bit lost writing a story for a game because there's a lot of information you have to do. You're trying to get this thing across, but the actor is all about the character and they will call you out and be, "why am I saying this?" You're like, ok that's 3 things I've got to check now: I've got to make sure I'm telling the right information, trying to get some character across, but also I'm trying to make sure it's true to their character.

[DL32] When we set out to do it we had environments that we wanted to use. Like I said before we had the level designers going through the space station and thinking what kind of places can we have, which would be the best for art and gameplay. What I was doing and **Will** was doing and **Dan** was doing was going through those areas and asking what kind of people would be there.

[DL43] Amanda Ripley was actually… I was living with a guy called **Chris Gascoign**, who's an excellent coder on our team, and we'd always come home from work and be chatting about it and he was an **Alien** fan as well. And he said, "Hey, your character is still going to be a female character… Why don't you make it Amada Ripley?" … The funny thing is I said to him, "yeah. I just don't think it's going to work Chris." … I mentioned it to **Al** and he was, "Ahhh!" Then we thought about it a lot and … it ended up solving a lot of problems and then immediately had a strong emotional core, because you're like, "oh my god she's going to find her mum!"

[DP31] I think one of the longest running and heated discussions during the entire game's development process was whether there should be footsteps and what having footsteps or not having footsteps communicated.

[ES3] But one of the other things about the size of that community [the interactive fiction community] was that it... I mean sort of in correspondence with how small it was it was also extremely... the people involved with it tended to be extremely sort of devoted and obsessive about it. And that meant that there was, you know, it was a real sort of community of experts, right? Like people who were involved with it almost certainly had played a large percentage of what was available to play. People were talking about a shared canon, where they really knew each other's

work very well and that made it possible to have critical conversations at a level that is much more difficult if you have a larger and more dispersed community and a wider range of content.

[GK27] But the narrative is just, particularly on **Transistor**, it was just me doing the writing and kind of going back and forth with **Amir [Rao]… Amir** was essentially my editor and I was the writer and that was it. So it was very tight knit in that regard and that let us go places with that story that I think would have been more difficult had more people been involved, because I think some of the more challenging ideas in narrative in general I think are ideas that are easier to sort of veto.

[LP7] So what happens normally is I get somewhere along that process and I realize this is not that fun. I need to add something or change something or remove something. But it's more of like turning the line a little bit, instead of spreading out into multiple lines. It's just sort of changing the angle of the line a little bit… the critical thing is really just the focus and the limitations as well.

[LP19] I can only say for myself that this is the only way I can do it. I think because, when it comes to a story I'm not that creative, and I think when it comes to mechanics I'm not that creative either, but put the two together and I can sort of build one on top of the other and get something that's interesting, so I can get them to fight basically and then record which moves they used and then make a game out of that.

[RP2] I was involved in narrative in as much as I coordinated with **Ashley Wood** who drew all the cinematics... with this kind of motion graphics, and doing the back and forth and kind of being the middleman between there. But the script was already written before I got involved in that side of the production and then also being there for the voiceover sessions and choosing like a lot of the voice talent, but in terms of the actual direction in **Kris Zimmerman Salter** handled that, and that was my first foray into there.

[RP3] One is just the incredible amount of work it took to finish that, and all the people we had to loop in and get some help from. But on the creative side of it I mostly look back at it in terms of the storytelling and actually the performances and the writing. And yet we leant... we borrowed a lot of voice talent from who we previously worked with, or at least I previously worked with on **Metal Gear**. People that I trusted and I was so impressed with their talent so I really wanted to work with them again.

[RP16] **James Clinton Howell** is a good friend of mine that I met through working at **Konami** on **Metal Gear** and he had a fan site for **Metal Gear** and he was translating a lot of stuff that **Hideo [Kojima]** was writing. And he wrote an amazing essay about **MGS2**. So we just kept in touch. He wrote the banned book critiques and he also wrote the vast majority of this manifesto that we shipped alongside the game, like this auxiliary fiction.

[RP19] Yeah, I mean I think if you look back you can probably say that there was a process, but being in the thick of it felt very much like we were playing jazz every day. But when I take a step back, if you look at it versus compared to other teams, I think the way that **Camouflaj** does its narrative is that the narrative drives pretty much every decision in the game.

[RP20] Meanwhile **Brendan** and I are fighting and working through really complex and difficult story problems almost on a daily basis for hours and hours on end. Our average meeting session was probably somewhere close to like 90 minutes a day. Every day... every time we'd have a meeting, because there's so much to unpack like as you can tell the game is very dense and there's lots of interconnecting parts and so it was just one problem after the next problem after the next problem and then going back and looking at the first problem we were trying to solve. And then talking

through how we would resolve that. So the way that I like to work is, I like to get us all into a room. I like to put all the problems on the board and try to map out what our solutions are.

[RP21] But that way of working is actually... isn't necessarily the way that a lot of other writers or other teams try to do things. Sometimes they'll do it by passing documents back and forth or by texting or other methods, but I really like to talk through the problems and talk about the characters. But even for Brendan It doesn't always work, what he does is he tends to take notes… And so after we go through that process then he goes into just pure script writing… I kind of bloody it up and give a bunch of notes and other guys in the team will give him notes and then we're really rolling by that point, but I really think it's just getting the story off the ground has always been like the trickiest part of the whole process.

[RPR4] Because [**Overlord**] was a smaller team I could have direct contact with the level designers, so I would work with each of them on their level, and they would do me a brief, which sort of went into detail about what was happening in their level and the mechanics that were being introduced, or particular environmental, or gameplay things, or boss fights. Then I would write a script that supported that level, but also put in the narrative that I wanted to be there as well, and so they would make sure that that was supported, and I made sure that my script supported their level. So it was very collaborative

[SG16] And so from there it's like, this is going to be a serious dramatic conflict between the family members and between the generations of the family, so what's something that parents could be mad at their kid about and we decided, "OK well if they fall in love with someone they weren't supposed to, that could be like an LGBT story" and then **Karla [Zimonja**, producer] and I were just like, "who do we picture the teenager… the kid being, and we were both picturing telling the story from a female teenager's perspective. So we were like "OK let's go for it."

[SV20] A group of us all work on setting and plot together, and then I am sort of responsible for creating the characters and I'm always pitching back to the team who the characters are and I'm doing that through mostly… at this stage I just kind of write interactive fiction for it. I just write little games where you play as this character, and then it's like you learn who they are and what they feel like through playing as them for fifteen or twenty minutes, and we kind of course correct as we go if we like them or not… but I think **Jake [Rodkin]** and I and **Chris [Remo]** are really the ones who decide what stays and what goes in the possibility space of the plot; and then there's character which is pretty much 100% me.

[SV22] And you know, that happens, and that sucks, but then we kind of go back and look at what's the problem and I'm like, "Delilah would never blank, so I don't know how to write that honestly, I don't know how to get her to the point where she's like 'yeah Henry I'll stay and meet you in my tower, come here.'" … You just kind of unspool, it's like a ball of yarn, or like a sweater you're knitting, you've got to unspool it back until you find the problem stitch and go like "ah this is actually the problem." And sometimes its way further back than you expected but you've just got to keep walking it back until you find the thing that's causing the trouble.

Having a clear vision
Discussion of the overall creative vision for the game and/or the studio as expressed through leadership or documentation.

[CG3] very early on **Alexis** decided the core themes of what the game was going to be, and some of those were kind of visual – like it was about light and dark – and some were emotional – like it was about loneliness – but those core concepts were what both the narrative and mechanics were built

on, and we tried not to add a story or a mechanic unless it had something to do with those core themes of the game.

[DG27] If you have a particular goal in mind or particular motivation in mind when you're creating something, that gives you a great foundation from which to work from because when you're stuck you could kind of fall back on that.

[DG36] I very... you know I run the company and I'm very conscientious of what I sell. I want it to be good. I want people to like it. So I'm very aware of you know my brand so... I'm not hands off.

[DG38] Well it's funny because they all kind of fall into the same category of 'Dave likes this.' So it's no surprise that all the games sound like they come from the same wheel house, because I was really heavily involved with most of that.

[DL11] you know the mission guys have got to make sure the gameplay is really cool and you've got to make sure the story is really cool, and you've got to step back sometimes. There were plenty of times when I'd get obsessed with a story point and think, "this is so good!" and then you realise that no one's really going to care about it, and it's not that important, then you pull yourself back and you remember... It's always good to go back to the pillars and go, "well, we're supposed to be making a scary story, it's supposed to be about the alien and it's supposed to be on a deserted spaces station" – they're the main things and as long as you hit the main beats of the story you can kind of fill in the rest in the world itself I think.

[DL12] Often that'll tie into something you're doing, because if you're working from the same pillars you're going to have a shared vision as well, you're always going to come down to the same route. Because they looking at it from a different perspective it always jogs you a little bit, then you have cool gameplay and cool story happening at the same time.

[DL25] When I say 'me' it was **Al** and the guys. It was nice because on that team everyone was just on it. Obviously you have a lot of people in a team… No one had to be handheld. The art was just straight there, everyone got the feeling of it.

[DP5] On **[Everybody's Gone to the] Rapture** I mainly worked at the centre of the team holding the different parts together and kind of supplying the vision, so I don't tend to work with the detailed level as much anymore. But that's mainly a scale issue

[GK18] And myself and **Amir Rao**, who's one of the co-founders of **Supergiant**, and we're both like English majors from our college days, and so we have like a shared knowledge of some of the stuff… we were just excited by that idea of this kind of more minimal... this kind of both stoic yet also emotionally rich narrative as... And for us the work of **Cormac McCarthy** was kind of a common ground for what could be a tonal starting point. And just a point of reference as well.

[GK32] I think it just requires a conscious effort to look for those places where any aspect of the game can reinforce the theme.

[GK48] Knowing what the kind of precise timing of that moment should be as well, and one of the really painful challenges of game development is like games tend to only kind of to come together at the very end of development. And like that's when... that's when you finally know where that like Andrew Ryan moment...

[RPR3] And that development is usually high concept stuff that the developers do themselves internally. There are high concepts around the location of the game, maybe a few scenes, mechanics that kind of thing. So that's where I sort of normally come in.

[SV39] But the thing is, if we took five years to make **Firewatch** the same would still be true right? They'd be all these directions we didn't go, except we just would have explored more of them perhaps and discarded them after investing in them instead of discarding them at the idea phase. You can only ship one thing and its funny to me to think how much of **Firewatch** was a by-product of, "well we talked about it for a day and then we went in this direction because we needed to move on." It's very much almost like TV or something, in that sense… They didn't like that so much. I really believe at one point you've just got to kind of, like, make story and tone decisions and just move on thoughtfully and curiously and be OK with undoing some stuff and be ok with shipping some stuff you wish was a little different.

REGARDING CONSTRAINTS AND PRESSURES
This theoretical construct organises several themes concerning the generation and movement of ideas through various human and non-human actors of the studio as a technosocial assemblage, and industry theorising around how these movements might be controlled..

Management of ideas
Discussion of how ideas are practically managed in the workflow through processes or technologies. Including the implementation, refinement and testing of ideas.

[CG4] I've got a whole half written hour long talk about this, it's quite complicated. We've got a bunch of different approaches that we use. So we have a lore spreadsheet which has got more than 200 columns… So when we need details the best source we have is the content management system itself and people can go in and find the content relevant to what they're writing about and kind of bone up on it.

[CG5] However we also try to make writers authorities on the stuff that they've written. So if one of our writers has written a chunk of stuff about a particular non player character, we'll use that writer as a resource if we want to know something about that character,

[CG18] But also we have three types of QA: we have content QA, which is the editing, we have design QA, which is looking at how the game feels to the player, if the content flow is suitable, if its giving away appropriate rewards, if its making full use of the systems it could be plugged into.

[CG20] When **Fallen London** started it was much simpler in its tools and structure than it is now, and there were basically two types of storylet… Now it's incredibly flexible.

[CW12] No it was all just the designers. So we came up with a list of archetypes: Science, medical, engineering, technical. And then we broke those down and thought, 'OK, what do we think would exist in those areas?' So we got through lots and lots of white boxes in **Sketch Up** and we also came up with mission briefs.

[CW27] But in Seegson comms you're there… in my numbers in mission 7, but I think it's actually 4, just because we had our own numbers and levels changed and things move around.

[CW44.1] There was just really so much playtesting to see if an area would work well

[DG42] There's a lot of design a lot of paper a lot of just trying to... I mean I can't work through the design linearly anymore like 'here's an obstacle and here's how to get past it. I've got to actually present different ways of getting through something.

[DL33] When we had rough stories about the locations and the people who lived there, one of the things we did is we had a narrative bible … What we'd do is parcel out those stories, so we're going to learn the first thing about the chief in this area and then we're going to bring it back in over here and we'll have characters cross over too, so in the text logs we have characters talking to each other.

[DL35] I had a very, very big spreadsheet. It's very big, it's insane. I dated everything. I started out with very basic bare bones kind of things… So there are kind of important points, to know when they happen, and you gradually fill it in and get more into detail, then you start passing it out and then you're checking it against the main story beats to make sure you're not contradicting anything. But you're also trying to reinforce things as well… So it's a lot of juggling. It's like one of those sliding puzzles where you're trying to get the squares in the right place, but it's also really fun. It's one of my favourite parts of it. So yeah I just had a big spreadsheet, moved them about, and then kept going to the level designers and be, "have you got this in the right place." And just testing everything to death. Occasionally also stepping back and looking at it from a high level and making sure you've not got anything that doesn't really do anything.

[DL37] Next time I'm going to use a programme called **Scrivner**. I've been testing out and its awesome. It's like a first draft kind of program where as you write you can mark-up dialogue and characters.

[ES17] I mean the thing with classics is you spend all your time sort of focused on these works by people who lived so long ago that you have no access whatever to what they were actually thinking. But in game studies like there are designers who've given interviews you could look at. It's not hard. You can even email them something.

[ES38] Like I think it's possible, and I've done something similar to this in some of my stuff, where you basically work out what are the key plot beats... what are the elements of this story that the player absolutely has to experience in order for them to have had a satisfying story by the time they get to the end? … and build out a graph that is basically a level design graph or a puzzle dependency graph, depending on what kind of game you're creating. And then put your game mechanics around… that is adopting the structure of the plot as the structure of your game.

[GK30.1] In our case on both **Bastion** and **Transistor** we didn't have to do anything like that, we could do it much more ad hoc and we benefited from being able to iterate very very heavily, on one hand you know it can be like a real... It's like very gruelling because we're iterating so much. But on the other hand that's helping us get to a higher level of quality where we could just redo, rewrite, you know, rerecord just line by line until every... until we think every line is perfect both in how it sounds and how it's implemented how it's timed.

[LP12] And each of those is not… when I originally designed those I don't have an idea of exactly where this is going to go in the game and this is going to slot into everything else. It's more of that, 'hey that would be cool if you got a rifle at some point and that top screen, where you've been watching people walk back and forth, there's some reason why it's there.' You learn that later. And so that gives me this little nugget of game play mechanics, or maybe a story element, a narrative element.

[RP44] From a technical perspective, actually what happens when the player goes back to Hope's room in episode 3. Like does anything change? Making sure those flags are being flicked. And it also increased heavily the burden from the QA perspective, every single time we release a new episode it double or tripled the amount of work that they have to do, because what if the player goes here and here and here instead of over there, it was just starting to make the game feel a lot more unruly.

[SV16] What I do is every time the player choses something or tells Delilah something that she would, as a human being, naturally remember … then we have a thing called global blackboard, and inside the global blackboard there's categories of facts: stuff Delilah knows, stuff Henry has told Delilah, stuff Henry has found, things like this. And we just keep a giant list of what's true. It's like this is true, this is true, this is true, this is true, this is true, this is true, and it's like hundreds and hundreds of items long.

[SV40] The story and how it arranges itself in the space is actually kind of an interesting thing in that we built a couple of tools for firing story events and they're really basic. And one is like a trigger volume, the other is a listener that goes "how long has it been since Delilah spoke," and those can have variations so it's like "how long has it been since Delilah spoke about these type of subjects." … So if you combine all that stuff you can get really sophisticated story shit. So now I have a pretty dynamic bit of story, I have no idea if it's even going to play in your game, and if I need it to play then I need to create a listener that goes "Ok, if the player gets to this point in the story and this conversation has never played, then fire this off." So you just have these little scripts that are constantly running that are "is it time yet? Are we there yet?" and self-destruct once the conversation is played. Just by those basic tools – trigger volumes and facts – you can just really arrange a really dynamic story.

Factors that influence and constraint creativity
Reflection on key issues that effect the creative process, especially limitations provided by material (resources, platform) or immaterial (genre conventions, source material) constraints.

[CG9] If you have a one to one relationship between the fiction and the qualities you hit the same problem that all branching narrative hits, which is the combinatorial explosion... So quality parsimony is about, where possible, having evocative qualities that can represent a broad range of fictional incidents or effects and that means we can use those qualities in our general economy.

[CG11] We have shot ourselves in the foot about the steampunk thing, because literally the first thing that happens to the player is that they escape from the stalactite prison on a giant zeppelin. And if you do that and then say, 'actually we're not steampunk,' it's not surprising that players push back… So they are useful ways to communicate to people that this game might have things they'll like in it. But when we're writing content they're not the touchstones were going to. We're not asking ourselves, 'what would Lovecraft do here,' or, 'how can we put cogs in this.'

[CG24] Freelancers bring their own voice and a freelancer writing a whole island might mean that that island might be quite different to the island next to it; might be quite different in tone, but because you have to sail to the other island it doesn't feel dissonant

[CG27] Adding extra islands does obviously mean new art and changing all the tile set systems and tile set juggling, which is a very complicated system so the burdens there would be much bigger.

[CW15] One thing I've found generally happens when it comes to, especially dialogue, is that you generally get more dialogue than is possible to fit into a space… So **Dion** and **Will**, they wrote loads

of great dialogue that would fit in within the space … and if a player doesn't stop and look at things then the delivery of dialogue can be completely off.

[CW19] But the problem I've always found, especially on alien because there was only the two of them, we had… 18 levels for two people, it would be really hard to ensure that every level was having the same amount of [attention] and the same when reviewing the game from a playing level and a narrative level…

[CW30] it would have expanded things so much more, but then you have restraints of time. We could have made that world so much more massive but there's limitations when it comes to making a game.

[CW56] the one thing that was always something that they were going to do was that they were always going to have the original **Ridley Scott** style **Alien**, so a really tall ominous creature, and one of it, and for the player to work out how to get around it basically.

[CW62] I think games have evolved and it's a great thing. That's why I think that cinematics within games is a good thing, in the sense that it's not a prerendered thing but a cinematic playing within an engine, so it feels like it's more a part of the game and less detracted. Having in game cinematics it allows you to be creating the story up until the last minute, because the production values that go into creating a full on cinematic by some other company, you have to be doing it so far in advance, the story can change and you have to try to work things around it.

[DG19] The engine there's really no constraints at all. In terms of the genre, yes and no. Because it's interactive you always have to be physically doing something. In a standard, like, **Bioware** RPG for example, you can tell the story and it's just broken up by combat bits. You know what the gameplay is already. It's just going to be combat. And then you tell a bit of story and there's another combat sequence. In a point and click adventure game It's not... It's not the same. You need to have actual tasks to perform and they have to be interesting and they can't just be busy work

[DG37] which is also why I'm kind of phasing out publishing because I spend just as much time often with the games I publish as much as one of my own… You know I've got a child now and higher expenses. I'm more interested in kind of getting more money coming in. So I was focusing more on internal development so we can keep all the money from the things.

[DL21] That ends up taking you quite far away from the pillars which was to recreate the feeling of the original film, and you end up throwing in story points that end up taking you so far away, but you're putting them in because you want to do something new with it… and every time we tried to do something really new with it, it wasn't **Alien** any more.

[DL45] The sound wasn't up, and sometimes it went off, but it was on all the time. We just kept digging into it. We were looking at art and level design and audio and we just kept picking up little things that we missed. We were asking, 'how can we work this in, whilst still trying to make something different?' We were trying to get down to the real DNA of it.

[DL47] Then it was making sure it was that world from the first film, and that everything was broken down and looked like everything was made in the 70s. Art had a thing where if you couldn't make it from 70s tech it didn't go in. That was how we made sure we adapted it right.

[DP18] That is the only real "ehhh" I've got about **Rapture**, is that low level interactivity isn't there, because the moment you start playing with physics it just *goes*… Because its five or six hours long

and had about, I think, five or six thousand props in the whole game, you start allowing that low level interactivity, suddenly you add a year to development. it was such a long period of QA anyway it kind of had to be about 18 months out we had to start saying we're not going to be able to ship this game unless we start making concessions where we can.

[DP55] I didn't want to make another **walking simulator**, whatever we do it won't be another walking simulator, but it's kind of doing something that's kind of a radical break for the studio

[DP64] So I don't know, it might change and **Steam** is getting very much like the **[Apple] App Store**, it's just you're not only struggling for attention, you're competing against not even games but the ideas for games with early access, and a lot of those early access games never get made because they're good ideas but they're impossible to make as games. For every **Firewatch** there are five games which sold under 3000 copies and some of them are really, really good games, they just never get the numbers.

[DP70] It is a commercial marketplace… we like to think of games as being part of the media industry, but I think it isn't. It's still a software industry. It's still driven by hardware, it's still driven by tech, it's still driven by patents and driven by systems, it's not driven by content still, and the real money is there. So like **Quantic Dream** exists because of their patents, they could not exist on the basis of their content, it's not strong enough, it doesn't perform well enough.

[ES29] There's an apparently process based issue when it comes to bigger video games. Well actually there are several. But one of them is that I think writing a really well rounded and nuanced character requires a certain amount of time... I mean they're first of all not always even leaving that much room for the writer at all in the first place, right? Like sometimes writers are brought in on a very sort of short term like you know you're here for three weeks and then you're gone. And then the nature of sort of videogame production schedules often means that once you've designed something it's very difficult to come back and revise and rewrite and say you know, 'we've gotten to the end of the story now.

[ES31] But if you're working in a commercial context it's very hard to do that and often the schedule is about, 'OK we're doing you know a vertical slice is here and then this is locked and we've got VO for it and God forbid you should want to change it because we'd paid good money.'

[ES33] I mean if you're working within an existing franchise there are all the expectations of that franchise to deal with as well.

[ES48] And that also is really good, like anything that you can do that gives the writer the freedom to improvise without a lot of other systemic friction means that you're going to get more writing and probably have a higher quality.

[GK23] And as we set out to think about a second project we thought 'why don't we try and do that again this time and like if **Bastion** was our take on sort of a fantasy game then let us try and make a science fiction game this time,' as sort of the other broad fiction genre.

[LP23] So instead of making the branches go all the way out, or making them come all the way out and come back in, I can just chop it off and put an ending there using this simple intro sequence system, and that allowed me, from the production side, to have a lot more going on in the game, because now if I had to take every narrative thread to the conclusion of the game I wouldn't be able to do it. Production wise, I couldn't handle carrying all those threads through the entire game and

resolving them all at the end. But if I can chop them off early then suddenly the player can do a lot of stuff.

[RP9] And then there was another idea, which didn't get into the game, which was I really wanted to tie Cortana with chief's helmet and like have her basically be one and one with the game's UI… then in my design the players actually lose the UI and lose her and lose any kind of value that she adds to the game, to have a sense of separation and loss. And we end up not being able to do that... it's just because the team decided not to move forward with that idea after I left. But that was one of our I think our better ideas in terms of trying to do something different with game narrative.

[RP41] And yeah you just reminded me just how much work went into episode five because you haven't even seen like the second half of that episode.

[RP43] But one thing I think we did at... one of our biggest failings I think for **République**was the time it took in between episodes of the releases, were just debilitating, for the business, for the momentum of the game, for the user.

[RP45] we just took some previous episode 1 spaces and destroyed them. It was a lot easier than making new spaces.

[RP47] It's difficult to account for branching narratives, obviously you're adding a lot more work and I think it ultimately came down to production realities of having a relatively small team. Yeah I wanted to do more. I think we could have done more, but ultimately it's because of lack of production resources.

[RP52] the marketplace is what ultimately will influence the game developers to the greatest degree, because at the end of the day we have to keep ourselves employed and our employees you know well-fed.

[RP53] you're going to have a game like **Tacoma** from **Fullbright** next year. And I'm sure **Steve [Gaynor] and** the team are going to do a really great job telling a story and I'm assuming that's going to be another big success for them, like they did with **Gone Home**. And I'm assuming that that **Tacoma** is going to be you know a fairly linear experience for you or linear interactive experience. And so there is room for it. The marketplace can support it. But I think the threat to them, to combine all sorts of more linear and interactive games, is how long can you stay on the radar before players have consumed all the content and moved on to the next thing? And so I just think it's more risky now than it was before, but I don't want to say that it's under threat. If it makes sense.

[RP54] Because as we we're finishing **République**I spent most of my time last year actually pitching and negotiating contracts with various publishers for our next title, and the vast majority of the publishers I talked to were not interested in linear content or semi-linear content, they wanted daily engagement, they wanted dynamic experiences, they wanted experiences that would bring the most **YouTube** clips and **Twitch** streams and would keep the conversation going for not a few weeks, but months, if not years. So they can continue to monetize, continue to keep players engaged in that IP or in that universe. And that's a tall order. And there's ways to solve that without having to build a huge MMO or some kind of MOBA or something.

[RPR22] And again a lot of the questions you ask will be dictated by the genre of the game. And you know how early you sort of got involved with it. But by and large it is about how the player is going to play through the game, what the mechanics are, who the characters are, and how they're going to experience the story.

[SG16] So that's where the whole mid-nineties thing came from because were like, "we can't put computers or cell phones in the game because we wouldn't be able to simulate them well and because all the information would be clustered in these digital objects," and we really wanted to have stuff scattered all through the environment.

[SG22] In **Gone Home** so much of the stuff that ended up coming across to people as an intentional subversion of the horror genre actually grew very organically and subconsciously out of a bunch of other constraints form the game… It kind of came from the opposite direction of saying like we wanted to make this game that's just about normal people and for the player to get invested in that. And then we were like, "OK, but it's an empty abandoned house," and through a bunch of other stuff we decided it had to be this big sprawling manor so we had enough room and enough ways to adjust the layout for this to be the kind of level design we want it to have, to support the narrative. And it needs to be the middle of the night and storm outside so that you don't think you should be able to just walk out the front door… So now we're like, "you're in a big empty Victorian mansion in the middle of the night in a thunderstorm", obviously people are going to be, "OK this is terrifying when's the serial killer going to jump out?"

[SV17] Then I go "wait a second, I as the creator of this whole fucking thing, know that it's possible for Delilah to know that you have a partner who you are possibly separated from, or that person might be sick." So I just run a check on what could possibly be true at this moment given all the stuff that has happened, then I create a bunch of moments that tailor themselves around that stuff… And it's sort of like the game... the way that we built the event system is super-duper basic, but any moment in the game can have an infinite number of options and any line in the game, any animation, any story event, any cutscene can have infinite options. The game is just looking at what's happened, what the player has chosen to be true and then picking the most specific one that fits. It's pretty basic.

[SV18] Yeah we did something that I think was really smart and I think was really stupid, which was we didn't build a visual editor for our event editor, we just built this spreadsheet system for giving things truth points. What that did is forced us to keep everything really dynamic and systems driven as opposed to like…

[SV38] The way we make game is… and this is like a financial thing… is we go, "OK guys we have 22 months and then that's when the game's got to come out because…" I mean that's not the schedule of the next game but that's what it was for **Firewatch** because that's when the money runs out and if we borrow any more money to make this game it is not going to be a smart business decision.

[SV44] That's sort of the point as the game should not feel like there's all this branching, it should just feel natural. And I think for a lot of developers that feels really scary because it's like "well you're just building all this shit that nobody's going to see.

Comparison to other games
References to other games either for comparison or critique, thus illustrating wider knowledge about or interest in the larger industry as an example of industrial theorising.

[CG17] Yeah, there are ones who do it. **Bioware** have an amazing editing staff. Yeah, I'm not sure how widespread it is. I think it's not that widespread. Especially as **Olivia** is not just doing copy editing. She'll comment on tone, she'll comment on continuity, she'll comment on things in violation of lore, she'll comment on the rhythm of our prose.

[CG36.1] We're getting things like **Gone Home** which is very personal and **Undertale** and **Firewatch** and **Sunless Sea** and **Fallen London**. And so I think we're hearing more voices. And **Papers Please** is another fascinating one, as is **This War of Mine**. It's hard to imagine that some of these games would have had the success and attention they've got now if they'd come out in the 90s.

[CW21] so we didn't have procedural dialogue in that sense, like in **Firewatch** which I didn't know, but I've only played a little bit of it, and I need to finish it. I know, no one could talk to me about it because they'd finished it, and then **Uncharted** came out and… too many games.

[CW54] The moment I played **The Last of Us**, I played it at a game lock in, and the moment they had an instant kill from the clicker I thought, "cool, they've done this, we can have that."

[CW55] So **Amnesia** came out while we were making the game. I wasn't on the game back then. I started on **Alien** in 2011, but I know a few people who were working on it before that and yes of course everyone would have played **Amnesia** when it came out. Of course anything can be a big influence, so I don't think they had **Amnesia** on their minds when they were making **Alien**, but of course they can play it and be: "this game does this really well, that's cool".

[DG20] So that's been my challenge, because this game I'm working on now is quite large and it's got a very **Bioware** kind of structure, where you have companion characters that you can choose to go out on missions with.

[DG24] My wife and I recently went through **Life is Strange**. We really loved going into everyone's dorm room and poking around and looking at their pictures and learning about them, or you could, or you could skip all of that. you could just blast through if that's what you want to do.

[DG30] This was a Noir story set in **Discworld** and it had that mechanic of taking notes. Combining notes. Combining clues to get other clues. That game took it a bit farther, where you could actually use the clues in your notebook as inventory items.

[DL28] But that mission in **Uncharted** had Nathan Drake talking to himself, you know he does it under his breath. I was playing it and one thing they've done so well… well I assume that's what they've done, is that they've made that level and they'd played through and focus tested it and they've just gauged everyone's reactions.

[DL52] I love **Gone Home** so much. I think with **Alien** you can explore but there's a lot of hiding, so you almost want to explore a little more. I know there were people who were asking whether you could do an edition without the alien… I think part of it, is what's so nice about playing videogames is just walking around… It must have come out when **Alien** was happening and I was playing it.

[DP20] **Firewatch** is an interesting one really because it's quite conventional in a lot of ways. They do the branching stuff, which is really interesting, with the radio and the way of delivering that is I think where they really get… it's got a greater level of interactivity than something like **Rapture**.

[DP23] They did so much right and I think it's not an accident that **Fullbright** have delayed **Tacoma**, because if **Firewatch** had landed and I was getting ready to ship I would have delayed what I was doing and think "hang on a minute, if we give ourselves another year what can we learn from this game", because there's a lot of interesting stuff to pick up from.

[DP34.1] The one I always go back to is **Mass Effect**, where I remember playing **Mass Effect** for the first time round and kind of playing it as renegade and being a libertarian Han Solo sort of thing,

getting to the end and they basically went, if you played raw renegade all the way through, they kind of suggest you're a human supremacist, and you're like, "fuck, I'm a space Nazi!" Well that's not who I played.

[DP36] I think where **Bioshock** is so amazing as a piece of game narrative and what they did so brilliantly, they played with that ambiguity of player agency.

[DP39] So games like **Shadow of the Colossus** and **Bioshock** work so well because they leave you that freedom to go, "this is how I feel about it." ... It's just undercutting where you are, it's never hammering you into a box, because the system should serve your experience and not the other way around.

[DP43] Yeah, it's really interesting. I think they also buy into a sort of anti-**Ubisoft** difficulty, of the pride of, "well how good are you at games? Well I got this far actually." You could play The **Division** in your sleep pretty much, but there's actually... only you've got to put the time in, you've really got to Game with a capital G, to actually finish a **Dark Souls** game and I think that really appeals.

[DP53] I'm obsessed with first person shooters. I'm a complete junky. I love them. They're my favourite type of game. I love the immediacy, I love how pitched in to the world you get that you just have nothing separating you, it really is like throwing you into it. And it's just a visceral genre. It's such an emotional... it's not an intellectual genre... So there's a very natural mapping of that across to doing something like **Rapture** or **Dear Esther** or **Gone Home**, that even though it might feel like those are rarefied, sedate experiences, they are fundamentally emotionally driven rather than intellectually driven, which is why **Dear Esther** has something more in common with **Doom** than it does to **The Witness**, because there's nothing intellectual about it.

[DP68] Maybe there are hard edges to what we can do with game storytelling and there are idealised ways in which we do it. I think we still over rely on cutscenes, I think cutscenes have come back and I kind of look at even stuff like **The Last of Us**, the beginning of it, everyone's going, "this is amazing, powerful game storytelling." It's not, it's amazing, powerful cinematic storytelling, and then it's got a bit of game after it. **Uncharted** is much more efficient in terms of integrating gameplay and storytelling but it's a slow process, you know?

[ES23] The gameplay [in **Ice-Bound Concordance**] is about choosing the narrative themes that you want to explore. You're not saying, 'this happens, this happens, this happens,' you're saying, 'here are the resonant symbols for this chapter and here are the themes that I want to focus on,' and this story sort of accretes around that. And it's really amazing, it's completely different from a lot of other things that are going on, but that's sort of a fascinating space to explore.

[ES35] But in terms of what else is going on in that piece, the ending [of **Firewatch**] is completely compatible with the rest of that. And you know the fact that you don't get to see her, and you're not supposed to get to see her, in the tower, you can see her stuff, but you don't get some sort of big romantic ending with her and you don't get some kind of heroic, 'Oh I saved the day' kind of experience because it's not that kind of story, it's about something else.

[ES44] And you know I think they think there's a good example actually, have you played **Oxenfree**? But it has a little bit of really really light platforming... But it's also expressing the sort of playfulness of this character and the way that they're relating to this environment as, you know, kind of a big overgrown jungle gym for them to explore. And so even though that mechanic is fairly non-demanding from a challenge point of view, it really adds something to the enactment of that character and getting the player mentally into the headspace of the character.

[GK13] But the narrative in **Spec Ops: The Line** was like the key... It was really central to the vision of that game. So I think in that respect I was a relatively good fit for that role because it was something I cared about a lot too.

[GK19] Our games are not capable of being played for two years. They don't have enough content and nor do we even want for players to have to develop that level of commitment to our games, like we're satisfied making games that people can play in a reasonable amount of time and just kind of move on.

[GK46] I don't know that a game has really done the kind of player agency question quite as effectively as **Bioshock**, I don't know that one ever will. For me that's one of those supreme moments where everything comes together and I think we just yeah... I take a lot of inspiration from games' ability to pull off those kinds of tricks, where you realized what you were... I think that's a great example actually of just the... you could have had exactly the same game... take Bioshock in its entirety, but play it - this is true of like **Portal** as well – take **Bioshock** and play it without... take the voice slider and put it all the way to zero. It's the same exact game but the impact is severely diminished because you don't have that like confluence of the mechanics and the narrative.

[LP22] The idea of empathy games was attached to a few games before mine, but at some point during development somebody said that **Papers Please** is an empathy game, like **Cart Life**, and **I Get this Call Every Day**, and that's when I first started hearing it a lot actually. That makes me, first off really happy because I totally agree with that.

[LP25] **This War of Mine**, which is a great game and I enjoy playing it, but it has that problem where there's no saves. There's just one linear progression through the game. So you do something and that's it, your guy dies and you're like, 'well fuck. I mean I realize this is what war's like, but I'm not in war I'm playing a game here. I want to be able sort of experience the space that the game is set out for me. I want the flexibility of that.'

[RP6] You can take the path of the silent protagonist and that, 'I'm the hero,' which I think is appropriate for some games, such as the **Bethesda** games that give players a very light wrapper and a very light context for like why they're there in that world, and they just let the player kind of be the hero. But there was also the other side of it, which I believe, on the other side the pendulum, which I think is where **Halo** fell and also where **Half Life 2** fell or **Chronicles of Riddick** and now a lot of... now Booker from **Bioshock Infinite**... which is 'this is an established character that I'm in first person view of and in my opinion like I'm not the hero,' it's... Master Chief is the hero and so let's bring out Master Chief's voice.

[RP10] Because when I was working on **République** I was looking very closely at the **Telltale** titles and seeing that they had kind of established this new medium, this new genre of five episodes and this pricing structure that people were starting to get used to, so there's five episodes, you can buy the season pass and you get all five episodes. And it was good, they were kind of training the customer to get used to this idea, and because we were episodic I thought, 'OK we should have five episodes the should be five dollars apiece. We should have a season pass, just so we're not confusing the customer. They're getting used to this already.'

[RP31] And this is before **The Walking Dead** and maybe even before **Sword and Sworcery**, around the time that maybe that came out. But this is before… like people really started spending all their time watching **Netflix** on their devices… You're not beholden to very action fast gameplay as well,

and certainly with episodic games you can do more with the characters, because it's something more akin to a TV show.

[RP36] In fact **Last of Us** towards the end I think does have a solid commentary about the role of the player and the role of the character, where he does something that most players wouldn't agree with and it's a good reminder that you're not Joel. And... but even if they didn't have that like players are still making these connections with these character, who're not them, but they're controlling them. And it's this really weird awkward thing, especially in third person games, that I just can never wrap my head around

[RP55] And I was really impressed with what they did [in **Yakuza Zero**]. It was a very traditional kind of cinematics and you go play a little bit, and get another cinematic, and you have an escort mission with this character. But it was really well done, really well performed… But I think only a select few of developers are still committed to that artform, again because of the marketplace realities.

[RPR11] But there are many games that... they just have the character being quippy and funny and Mr nice guy in cut scenes, but he's still murdering everyone.

[SG9] For me it's an aspect of just the player feeling like they're integral to the experience of discovering that story and being involved with it, and that doesn't have to mean necessarily something like a **Telltale** game or something that's like, "I'm going to do branching narrative and affect the outcome at certain points of the story."

[SG31] I think **The Witness** is really cool and when you see stuff like the guys who founded **Campo Santo** to make **Firewatch**, they worked at **Telltale** on **The Walking Dead**, then they made **Firewatch**, which I feel is a kind of melding between **Gone Home** and **Telltale**; first person environmental exploration plus this dynamic branching dialogue system. And you know they've been incredibly successful.

[SG32] They [the developers of **Life is Strange**] told me that when **Gone Home** came out and they really liked it and it was successful and that was the thing that allowed them to say, "look this thing we've been making, there's another thing that came out that's kind of like it, that people actually like and they're buying, so we should totally actually make this." It's part of what allowed them to put that game into production.

[SV4] Creators like… everything that **Valve's** ever done, stuff that **Brendan Cheung** has done, things from the indie game community as a whole.

[SV9] It was **Mafia 3**, and I'm like, 'OK great,' a shooter game called **Piercing Blow**, not going to play that… I'm just looking at this thing spiral. Ok there's a **MOBA** I'm not going to play with a monkey with a hammer. There's just not anything there. And I don't think… I just think it's an underserved audience. We're all older now.

[SV15] It's as simple as on **The Walking Dead** games, the **Telltale** games, it's like 'so-and-so will remember that', those little call outs. I was never a huge fan of those for a lot of reasons, and then in **Firewatch** we were able to make just every choice possible matter, even the smallest ones and call them back later, so she'd be like "oh I was just thinking of that thing that you said earlier", that you may have mentioned off hand and you just feel like the possibility space of the game is really big because of it.

[SV30] The most memorable parts of **The Last of Us**, which is a game that I really respect and adore, I really think the ending of **The Last of Us** is masterful. It just really, really made me mad. I like DM'ed **Neil Druckmann** and was like "fuck off!" It's the most memorable part of that game, the ending, in my opinion… So that ending is completely static, that ending is zero player input, you walk behind Joel for a while, and that stuff really works I think, and then you come around the path and you guys have the talk on the ridge and that talk… you don't *have* that talk, that talk is completely a cut scene.

REGARDING MACRO NATURE OF STORYTELLING

Moving the focus to the nature of text produced in the studio, this theoretical construct organises several themes relating to industry theorising on the nature of storytelling in games including attempts to reflect upon and overcome the tension between gameplay and narrative.

Spatial Literacy

Based on Celia Pearce's concept in 'Communities of Play' this acknowledges the importance of developing spaces that are readable by the player, the thinking behind how virtual spaces are constructed, and how storytelling is embedded in environments (environmental storytelling).

[CG31] I think it's not obvious from the map, but the **Sunless Sea** map is divided up into several zones, and within each zone there are a number of tiles and the left hand coast and the south coast are fixed, so stuff there appears the same in every game… that gives us some kind of basic rules that we know about that we use when writing content, but it also means when **Paul** is designing the tiles, he can design the tiles in a single cluster to share similar elements or to fit together.

[CW4] There's CCTV cameras in the level so they know exactly where you are. That's kind of the bulk of the narrative for that mission… You can hear it from afar, with like a recording from Samuels going out over a tannoy and go towards it based on the audio… The best of that level is almost storytelling through the environment

[CW6] What I always liked about Kuhlman was that we had a lot of bits of narrative in the environment, so on terminals and audio logs we seeded a bit more of his background to the player, they may not have witnessed that. But it's all down to how the player plays the level in the first place.

[CW25] The thing that a lot of players don't realise about **Alien: Isolation** is that, other than after a certain stage, where you're basically at the end of the game, you're able to go back to any area and re-explore it.

[CW26] We kind of had a system that would then put things into the area based on what players had experienced, so once the players found the alien, he could then be anywhere on the station… because it kind of encouraged us to the think about adding extra areas onto levels, which players might not decide to go to, but if they did then they'd be something they could unlock.

[CW31] I've watched loads of people play it after it came out and so many people play it as like a linear game, which I find quite funny because although you could say the story is linear, the whole environment isn't.

[CW34] We were using modular assets but having our artists create a bespoke environment still… we did a really good job of just trying to redress environments and because we created bespoke pieces that can just add that tiny little different element to the levels that makes it just feel like a completely different space and that helps with any storytelling we want to do

[CW37] One of the nice bits that does actually fit together is the hospital levels… So for those who notice it, it allows the players to realise that it's all connected together.

[CW41] Yeah it's intense, but we do have little bits of story in there without being right in your face. So for those who are thinking about exploring it and taking in everything they can get more of a narrative from it.

[CW47] One of the rules that came into the having loops and stuff was that we had to make sure that the alien could get into almost every space.

[CW50] By having players gradually unlock things in … the **Metroidvania** sense, because we have the hub based system and the different tools and weapons that you unlock gradually – we're just creating the game that we want to make because you shouldn't get everything at the start of the game and it's a great method to have a player learn a game in a nice concise manner, so they can gradually learn what weapons are good against what, so we can introduce things when they are good.

[DG13] And he's like laughing and joking and kind of like being glib and humorous the whole time, and the tone was kind of all over the place. No, you've got to be consistent. It's like if he's... if you're robbing someone's house and this is your first time doing it. You're not going to be so glib and humourful. You're going to be scared and you're going to be nervous and that needs to come across. So keeping everything consistent is the biggest part of environmental storytelling.

[DL9] So you have the script of the main game and the missions and then you have background world stuff – so this is all the posters, all the items in the game, the companies you see, the kind of people who would be there, the side characters and stuff like that.

[DL18] Even if you are a heavy reader, in a game you don't always want to be reading text, often you just want to play the game. I try to keep all the environmental storytelling and text logs… that's not the main story but it should inform it, it should add depth to it if you happen to see it.

[DL34] As the areas unlock a little bit **Metroid-Primey** where you… Metroid Primey brilliant [laughs]… So there's unlocking with the level design, but the stories that happen inside, they were designed so you can only unlock certain stories at certain times because we don't want to break any spoilers or anything… But it's also about the escalation. You could be in the same area as you were in before but you're going to have different enemies and puzzles, so it's a bit of a mix. Tracking all of that stuff is intense, because obviously everything changes a lot, you'd often have a story laid out or a back story and then if something moves you've got to shift everything else about, and it normally means shifting five or six things to make it work.

[DP25] It was just about that idea of: create a world, lace the world with story, don't do point to point – where it's an open world but then you have to go to point A, then point B, then point C, so it's not really an open world in terms of the storytelling – but to do something where you could fundamentally go wherever you want in whatever order you want. What does that do it terms of constructing drama?

[DP47] So its fundamentally you're telling your story in your way, within this kind of framework we're creating. And if you're thinking about it like that, then you're not thinking about it as being a series of storyboards, you're thinking about it a being like a building.

[DP48] It really ties in well with what games are really good at and environmental storytelling, of going, "within this space, if we provide XYZ clues then you are probably going to tell a story that's a bit like this." ... So it's just hooks and that comes, I think, from a lot of stuff I saw as an academic of looking at stuff like narrative psychology and the idea of sort of proto-narrative units, of going, "people are fundamentally storytelling animals," in the way our psychology works, and our memories are a narrative, and we take things and we go, "I put these pieces together and it's likely that I'll tell these types of story."

[ES24] You know I think it's also valid to say, here is a piece in which the mechanics and the system are asserting something about the world model and how the world works, right?

[GK33] But as you move through that restored world, you're destroying it again. So there is immediately something that is going on there just visually, and then the narration makes it rather overt that it's this game about... there's like restoration and destruction happening at almost all times, the sort of cycle, and players start attending to that, I think as they play and you know… But we gave you a hammer because a hammer is a tool for building and a tool for destroying. We found it very... Or it can be for destroying when it's like a sledgehammer... So we found it very rich thematically.

[RP8] Master Chief crash lands, you kind of go through the wreckage and it is kind of like this **GTA** style like walk and talk with Cortana while they're in the warthog, and it's a very linear, very much like a very deliberate narrative experience versus like 'here are all these great set pieces for combat encounters.'

[RP18] all the A-story, are being pushed to the player and put in front of their face, so like they can't miss it. And then when it came to the B-level plot was mostly explored through these things again we called POI, these points of interest, things you scan in the world to help flesh out the characters, flesh out the subplots and all that kind of stuff. And then the C-level stuff is more about worldbuilding. That's the stuff you're trying to talk about, like the banned books and like the letters and really…

[SG5] And so part of designing something like this is saying we need to guide the player through the spaces in a way that they encounter the narrative elements in enough of a chronological order that they can put it all together, and they don't accidentally find some random part of the story early, unless it's intentionally a non-linear thing. And so the shape of the house and the way that some of the doors and some of the secret passages are arranged, so that you can only see certain parts of the house in certain orders until you have explored enough of it to move on, is basically our way of breaking up the game's story into chapters or acts, like a three act structure kind of thing.

[SG8] but like a **Bioshock** level, **Gone Home** is constructed as a linear experience that requires you to do certain broad strokes things in a certain order, but built within a non-linear contiguous environment. If you're trying to do something that has chronologically ordered structure to it then I think that's a pretty valuable approach, but that's also my own personal aesthetic, to say that I like to go to a place that feels like it's a believably constructed, complete looking location that I can just be in, but it's also cool to be loosely guided through an authored dramatic experience within that.

Relation of Gameplay and Narrative
Specific reflection on how gameplay and narrative relate to one another or description of practical attempts to bring the two together. Also reflections on the studio's specific approach to storytelling.

[CG7] So our mechanics are abstract as well, and when we reflect a secret you've learned in the mechanics, it's not a one to one connection. We have broad conceptual qualities and rewards that we can grant to represent it. However, it's constantly a struggle with writing.

[CW13] it wasn't massively fleshed out at that point, so we were just trying to figure out what would work well, place missions in certain areas, figure out what we wanted to give the player in a gameplay sense, so what mechanics they would have in each mission, and have that fit around the story.

[DG3] I mean the actual mechanics of **point and click adventure** games are quite... aren't terribly interesting when you think about it. So the reason why you play is because of the story, because of the narrative and environment.

[DG32] the only way I really try to merge that is to make it something you discover and make the player as part of the experience as possible.

[DL20] We definitely wanted it to be story driven but we didn't want it to get in the way of the gameplay, that sounds obvious.

[DP16] But when we play tested it the feedback we got from players was they were getting really frustrated because doing that becomes an intellectual mechanical action that takes me out of the world, and actually I'm just trying to go, I'm trying to be in the story and artificially doing a puzzle makes the story a reward rather than a feature of the world.

[DP22] So **[Dear] Esther** was minimalism, it was a real exercise in... at that point the discussion was that story and gameplay are antagonistic and story was secondary and you could have no story in a game and its fine. But if you start taking away the gameplay then it just won't work, and all **Esther** was going, "well, alright then, let's try it. Let's get rid of all the gameplay and see if just story, does that still work?"

[ES1] And I think some of the academic work that's been done in this area tends to oversimplify a bit. I mean certainly some of the older **ludology vs narratology** debates I think are basically not all that useful, and I find it much more useful to think about some of the things that **Jesper Juul** has said in **Half Real** about you know that sort of juxtaposition of fiction and mechanics in a way that the pieces can play off one another, but not assuming that those things are fundamentally in conflict with one another.

[ES40] I think it is definitely possible for mechanics and gameplay to be a very powerful part of how you tell a story.

[GK29] It's a pretty loose outline but it's kind of like, 'who are the principal characters and where do we think the story is going?' But we're very much a game play and design driven studio so we don't really get the... ultimately the story is subservient to the design and the game itself must be built before the story can be executed.

[GK37] It deliberately has no gameplay consequence. It's not like... it doesn't make you more powerful. It just stops you. So you could stop and you can hum. But it was very important to us to kind of express something about the character and about the tone and about the kind of experience that T**ransistor** was intended to be. And it was not a small amount of work because it sort of connected to every single piece of music in the game uniquely and so on. But we felt it was valuable and players responded really really well to it.

[LP11] Well I didn't realize this until sort of in retrospect, after **Papers Please**, but that your bureaucratic structure, for me, it kind of goes back to giving the player limited mechanics. It creates this sort of structure that makes communication very easy with the player and it sort of sets up this matrix of mechanics and rules… But because it's presented to the players that these rules, these bureaucratic quotas that come from above… Then the player doesn't question it. And now it's not like a problem with the narrative anymore. It reinforces the narrative. The rules are always changing. It's a crazy system.

[LP18] I normally start from the mechanics and the systems. I normally think, 'OK I want a game... I would like to just check or correlate some documents.' So that's where I started. I didn't start with an idea of, 'I should do a game where you have to let people through a border and you have to make moral choices all the time.' It started with the mechanics and I guess the way I think about things is from the mechanics, and I think, 'how can I make this interesting without sacrificing the mechanics.' So how can I add things to this that use... that are sort of build on my mechanics. How can I make the narrative work on top of this, and also feed back into it?

[RPR9] I think we sort of aligned the character and game play a little more tighter where we could. It was much harder to do that in the first game, I think, because she is more... not exactly an innocent... but you know she's... not so experienced in this kind of world, and is innocent in terms of not taking a life, until it was the first time. But yes... I often ask journalists this, 'OK what highlighted that to you? Is it because we gave her, you know, some emotions and feelings about what she's doing?' We weren't the first game to put some emotions in there... you know maybe when it comes to Lara.

[RPR14] It was considered more as a kind of action adventure with strong third person shooter elements. I still think that if we did it again, we would still choose to kind of give her emotions. That felt right to that character in getting in that situation. But writers don't have control over the game play, and how much gameplay there was. All we could do was fight our corner. But you are trying to balance the needs of game play and the needs of players. We have play testers say, 'we've got a gun, we want to use it.' It's a difficult situation, do you go against what your players want for the needs of narrative, or do you give them what they want and allow narrative suffer?

[RPR17] I always try and, as you say work back from, 'OK, this is the action, now kind of feed that back to a character that is as realistic as you can get within the game space, without being a sociopath or a complete serial killer,' which I guess are more or less the same things. And with Faith in **Mirrors Edge** I was looking at kind of, 'OK, the running. What made her want to take on that life? And what was she running away from?

[SG4] I think any given game, any given interactive frame, could tell a lot of different stories well and [with] the heart of games being an interactive, player driven medium, I personally think it makes the most sense to start from what the player's doing and then say what is a story that can grow out of that and be interesting to tell.

[SG2] So, you know, for me even in a game where the story is paramount to the experience – to get to your original question – its role is still supporting the gameplay and the interactive aspect of it and the form of game that it is. You know I think that with something like **Gone Home** the story that we told was… through the interactive elements that we had decided the game was going to be built out of. I don't think those two things can function in a vacuum, from one to the other, and I think that, in fact, the form and the interactive aspect of the game has to drive what the story is for it to really be a successful melding of the two.

[SV10] Game two were going to start with gameplay mechanics and then go back from there, so that's going to be interesting. I think that might yield a more videogamey experience in terms of what the world is capable… what tone the world is capable of maintaining. But we'll see. I'm kind of curious about that. It's kind of more of an experiment.

Procedural vs authored

Reflection on strictly authored stories embedded I the game space versus story that emerges from the games systems, or what Janet Murray calls 'procedural authorship'. Including any statement of preference for one over the other or a consideration of their differences.

[CG32] You can have all kinds of great stories arise out of procedurally generated content, but procedurally generated content also won't reliably give you a sense of pathos or a celebration of something that an authored piece of content can. I think actually most people who play games play both sorts.

[CG33] **Alexis** often uses the phrase 'fires in the desert,' where our storylets and events are like looking at a desert at night from above; you see these bright fires and you can travel between the fires, but how you move between them is kind of up to you. And the order you move between them in, and whether you go to some or don't, and whether you go back, means you're having a different experience.

[DG29] Yeah, it's not easy to do. I mean emergent storytelling, it's neat, like when things just sort of happen. That's really, really fun. It's like when two people don't have the same experience. It's neat. That's where you get like wacky things happening in **Skyrim** because like two random characters, or monsters, or whatever, encounter each other and random crap happens. It's kind of fun. That's why **Minecraft** is so enjoyable. But in my kind of games everything is pretty rigid and prescriptive.

[DL55] I don't think it's been done before **[referring to the alien's AI scripting]**. I think it is really new… I know the guys worked on it for ages. It did give us loads of surprises. There's a bit at the beginning, it's in the airport level… It's funny because we were playing it and at the time I don't think the alien was supposed to appear. But it did. The designers were doing a playtest and the alien appeared and scared the hell out of them… Not knowing when it would appear, ever. And that was a great example of it. It needed something and then something broke but ended up working so well that we were just, "alright, the alien can appear here."

[DP24] the whole world is based on a big scoring system, so every single event, location, scene, prop has a counter and score system on it, and depending on what you're doing that score system is being constantly revaluated, so it's then broken up into zones... So broadly they're going to all of the critical scenes they're moving between, but they're also attracted to points of interest in the environment, which could be other scenes or props, so the idea was that if you had a mote coming along and it stopped by a bicycle and hovered a bit, and then moved on again, it's not just about signposting the bicycle as being important, it gives a bit of personality to the mote as well, so you don't feel like they're just a tool that's going, "come here, come here, come here."

[DP44] So I'm not a huge fan of branching narrative… It's a kind of old school arcade model. Its **Donkey Kong**. If you don't jump at the right point you don't progress, if you don't climb ladders you can't complete it. "It's my game, you fit my game." And I think that can work in some games, but you're always going to have a very specific type of experience with that.

[DP45] I'm more interested in the kinds of game that go, "it's your game, the contract we have between me as a designer and you as a player is you understand the limitations of what I can deliver, but within those limitations I give you as many degrees of freedom as I possibly can, for it to be your game," and we kind of shake hands and agree that neither part is perfect, but fundamentally the experience you're having should feel that it is not just that you have become a product that's been stamped out on the conveyor belt, and every player who plays this game is the same, and every experience is the same, but you're able to bring something of your own personal experience.

[ES46] And so that's very effective in kind of producing this smooth continuum between the more procedurally driven bits and the more authorially driven bits which is always one of... this is always a challenge which is if you're doing something that is procedurally quite rich, making sure that there isn't an obvious seam between one kind of content and another. You know this very particular set of preconditions is required to give this particular message to the player, when the player gets those moments that are very tightly honed even if they happen only once or twice in the game. They tend to be very impressed. Like 'wow this game is really paying attention to what I've done.' So you get a lot of audience impact out of those moments.

[GK43] I think the role of authorship is to create the... is to create the context for the player. It's just to sort of [to] define the palette of the experience… like we want to make games that are highly expressive, where players do feel like they can express themselves and have a rich set of interactions within the world of the game. But that rich set of interactions is still fundamentally bounded by the parameters of the game, right?

[SG6] The fact that the audio diaries can fire off anything and that they're this meta element that sort of doesn't have a clear source but is just a voice over narration while you're playing **Gone Home**, allows us to put the audio dairies in chronological order through the space without having to say literally like here's page 1 of the diary that someone tore out and put in the drawer, and here's page 2 of the diary that they tore out and put on this desk.

[SG10] it gives you the tools to do that and trusts you to be able to use those cues and those tools to progress through the experience roughly as intended, but the rest is up to you.

[SG25] I think that all games on some level are simply a means of communication between the designer and the player, but it's often extremely indirect…I mean when you play **The Witness** or something all of those puzzles are a very direct communication between the designer to the player and what those puzzles are communicating over time is here are the rules of these puzzles, effectively here is this symbol language that you're being taught over the course of the game…That's a very direct form of communication where the designer is like, "I wrote all this text and now you will read it" [laughs]. Then there's an extremely indirect version where it's like I set up the rules of this extremely abstract game with no text in it at all and through interacting with it you say, "oh here's what these rules mean," but it's all a mediated communication from the person who arranged the rules and the content to the person who is activating them by interacting with them.

[SV19] That's the thing we struggle with the most. Is just, "ok we know this emotional scene is going to happen, but what happens if the player doesn't want to make it happen?" Then we need to have another version, you know?

[SV31] I mean I don't know where the hell you were in the world when you had that certain conversation, because most of the conversations in the game just happen when they happen. They, like, make sure they're allowed to happen and go "hey let's do this." They're not geo-tied, pretty much.

[SV37] I don't know if we have the skills yet as a studio to tell a story with a fully unreliable narrator and have it land. I don't know if we have that skill set yet. I think we're developing it, but I don't know we could do it with confidence and hold onto the majority of the audience for the entire game.

[SV42] So if you have the conversation about like "Oh, my wife has Alzheimer's, she's probably not going to ask about any potential break ups you've had. There's a whole bunch of stuff she's not going to be asking anymore. So what I do is I create one event, I create one trigger, and all it does is goes [inaudible] and then that fires and a little script looks at every single thing that Delilah knows about you and picks from 30 different lines of enquiry and goes: "I'm going to ask you about this." That's using the fact system… the event system we have that I was talking about earlier.

REGARDING PLAYER BASE AND THEIR RELATIONSHIP TO THE GAME
Moving the focus out to industry theorising about the studio's relationship to the player, this theoretical construct organises several themes involving how the player is conceived of and, indeed, constructed within the game studio as well as how design choices are made to communicate the ideas and narrative explored in the previous construct, as well as wider reflections on varying experiences or motivations of play.

Player experience
Reflection on how the design of the game attempts to model or influence player behaviour and evidence of the manner in which an idea of the player is constructed to justify design decisions. This includes reflection on techniques and concepts central to the player experience like interaction and immersion.

[CW3] Then he takes a shot at the android, which explains to the character… the player through visuals and, I guess, through narrative as well that if you are aggressive to these androids, then they will be aggressive towards you… because at least seeding it before hand through dialogue and through, I suppose, a non-interactive moment, we can try to help the player understand that.

[CW11] "Oh actually we need the player to see a screen in the android level because they need to find out that they can turn off the CCTV cameras in the way." So we have multiple things in the level trying to tell them that information.

[CW28] so we had to make sure firstly that we opened up other areas for the player to be able to use in the later mission, so they had another way to sneak through the level and to play in a different way.

[CW29] We didn't want to not give the player anything extra for exploring, because we wanted to encourage it. So we had to make sure we had enough stuff.

[CW42] So that would enforce us to use loops inside the levels, not so that the player would get lost, but more that if the player was cornered in an area with the alien they would have a means of escaping…treating them fairly as player.

[CW45] He wasn't a very clever alien, one of the things I think is pretty cool about it, and is why I'm so good at playing it, is he makes a certain sound when he enters the area to warn the player.

[CW49] **Gary Napper,** who is the lead designer, and **Jon McKellen,** the UI lead, did a Q&A talk at **EGX Rezzed** a couple of years back and there was a guy who was like, "why didn't you get the flamethrower at the start of the game, because I much preferred the game once I had that, and all

the levels before that were crap because I was just hiding." If we gave the player the flamethrower at the start of the game it would be a completely different experience

[CW53] I can see people have easy times in levels and people who have hard times in levels, because with systemic AI you never know you're going to have the same experience as someone else.

[DG7] So a lot of developers like **Telltale** for example and others, myself included to a degree, put a lot more emphasis and effort on immersion and making it more rewarding.

[DG10] It's the difference between reading about it in a book versus doing it yourself. And you tend to retain things more when you do them yourself. And so if you uncover a piece of information in one of these games it tends it tends to stick with you more.

[DG18] It's not enough that the player knows what's happening, it's that the player cares about what's happening. And that's the difference between like just playing the game and remembering it and like having it stick with you.

[DL39] Anything else that you want to put onto an audio log, or a text log or on posters or mise-en-scene, that can't be the main story because some people aren't going to see it… So you've got to accept that people aren't going to read all your story, although you want them to because you've worked really hard on it, but you've got to keep the main story in the game play and in the cutscenes, don't try and tell an important gameplay detail when someone is scared out their mind or in the middle of a gun fight.

[DP2] I think when we started making games that were not geared around trying to get data, but much more geared around making sure the players had a good experience, I think that's when it became game design.

[DP13] I think part of the reason why I've never taken seriously the 'is it a game' thing, is because when we made **Esther** we launched it to a community of **Half Life 2** modders, so it's like the hardcore of the hardcore, and they're the ones who championed it.

[DP24] The other thing we wanted to do was to look at the fundamental thing of game storytelling, as opposed to other storytelling, which for me it's not interactivity, it's agency, it's the sense of being in the world… So can we take that sort of minimalist **walking simulator** approach to things, but put it in a fundamentally game based context and still create a narrative that is, I suppose, 90-95% nonlinear, but still retains a strong, dramatic, satisfying arc, and that was it. That was the cornerstone of the game design.

[DP38] You're telling me what I thought and what I felt, because you need me to have thought or felt that, because your architecture of narrative and imagination is so restrictive.

[DP46] And that for me is really great emotional design. When you pull that lever and that trapdoor falls open it shouldn't be you thinking, "oh I did the right thing for the game," you go "I made that happen, I found the trap door!" And it's a different attitude towards game design that is more modern I think than push the button, do the thing, cookie cutter comes out.

[DP54] And that's pure first-person shooter to me, the majority of that experience is being in that space, in that moment. And that's what I always want to try and capture with our games, that sense of presence, of being there, of going, "right now this is the world I'm in."

[ES22] They can give the player the opportunity to sort of explore at whatever pace and in whatever depth they like. So if you have something where you want to tell a story with perhaps a lot of world building in it, but you don't want to overload the player and you only want them to experience as much as they're interested in, an interactive context is great for that because they can decide

[ES34] And a lot of this sort of standard wisdom about how you should do AAA sized projects… you know people will say like, 'how is this giving the player what they want?' Right? People will bring up this assumption that it has to be a certain kind of experience for the player as like a bedrock assumption of what they're doing. And OK if you're starting from the point of ,'I am trying to make a fantasy for the player that delivers the experience that the most… you know, see as most wish fulfilling,' then yes of course that is going to limit you artistically to certain kinds of things.

[ES41] But if there is something that is key to the player's experience you have to make sure that it's on the critical path, or else you don't get to gripe about... the fact that some of your players are going to have a suboptimal experience.

[ES43] They can also do things that provide part of the experiential storytelling, so I was talking about you know you could have a mechanics of failure where part of the point of the story is for the player to realize that this particular system can't be beaten or it can't be beaten fairly or some compromise is required.

[ES50] Like you've constrained the player in such a way that they don't feel constrained, because they have this other space where they have the type of direct moment to moment affect style agency that they're used to. So they're less likely to kind of notice that there's this other agency, you know their agency over the narrative content is actually quite curtailed.

[GK11] And then if the if the player's actions in the game feel meaningful then the game itself can have a higher impact on the player and leave a more positive lasting impression on the player and so forth, versus like a similar game that, you know, doesn't really have any story to it.

[GK22] And now we have this mechanism for how the game can provide a richer context for whatever the player is doing. So we're making this game with relatively simple mechanics. You're basically just running around and fighting. But we have a way for the game to reflect on the significance of the actions that you're taking and to kind of play with you and interact with you and surprise you, make you feel like the game is paying attention to things that games don't normally pay attention to and all that stuff, for us was very interesting and it turned out you know as we started testing the game with people, people responded really well to it also.

[GK34] It wasn't about like, you know, pick the right choice, it was about empathizing with the player and providing the player with the opportunity to express how they felt at that time about the character. And the moment ended up, I think, resonating really strongly with a lot of people. Both the presence of the choice and the outcome of that choice, and it's a game where you can where you feel like you can forgive someone for something that they did.

[GK42] We don't know if people are going to like it, we just know we're not going to like short change it from our end, which we think raises the chances that people will... that our players will feel satisfied, if not... players feeling happy about it isn't necessarily... at least with **Transistor** that was not like what. Like being satisfied and being happy are two different things. We just want our players to feel satisfied and fulfilled and to kind of experience various emotions along the way to that.

[LP8] it's a way of communicating with a player that I like because I don't like tutorials, long tutorials, I don't like dialogue. I don't like a lot of story dumps, things like that. So if I can make the mechanics very limited and then communicate that to the player, then to me it's a lot more fun to play as a player and also it's a lot easier as a designer to sort of just fill that space out I guess.

[RPR19] You're always having to consider the player. You're always trying to align what... ideally align the player and the player character, so trying to put the player character sort of more or less on the same emotional spectrum as the player. So you know when Lara was kind of new and confused and vulnerable, we put the player in a situation where they were new and confused and vulnerable.

[RPR26] Well I think that was actually based on genuine feedback from our play testers, who sort of said, 'I feel like I want to protect Lara. I don't feel like I am Lara, I feel like I'm on a journey with her.' That's totally valid! You know it's not the same for everyone... And I think that was maybe where the interpretation got lost. Just because our play testers are saying that, that doesn't mean that's just what it is for every player.

[SG7] And so it all just kind of flows together and the story is flowing with the exploration of the space as the player goes and they – hopefully, if you do it right – aren't thinking about the mechanics of that and are more just pulling themselves along with the internal logic of the game and having the intended experience.

[SG13] The game, as far as its concerned, If I just want to not touch anything apart from the objects that are required for progression and get to the end, the game reacts the same way to that as if you had played extremely thoroughly, and so what matters is what you get out of it by investing yourself into it and not the game saying "da-ding! Da-ding! Da-ding! You've found 50% of all of the important objects in the game." And because as far as I'm concerned if you're just doing it for that reason, then that's not the point of the game anyway, you know what I mean?

[SV33] That's a totally valid way to go! If you think about this guy out in the woods alone, that's totally the type of thing a certain person would do over the course of summer. And it's such a weird personal, self-selected goal, and I imagine when you think back on the game, and you think about what happened and when it happened, it's always slightly shaded by this weird mission you gave yourself to find all those novels, you know?

Subverting expectations

Reflection on going against the expectations (or not) of a player, or the characteristics of a genre as well as reflection upon the specific means of doing so and why this might be productive. Includes taking a risk with new unproven ideas.

[CW48] I don't think it was that we were trying to intentionally push back against what the players were generally expecting from the game. It was more that we were trying to create a game that felt like the original **Alien**, and for most of the film the crew weren't empowered.

[CW52] We just wanted to make sure it wasn't like anything the players had experienced before in an **Alien** game because the moment you can kill an alien it becomes a bug hunt – so **Aliens** – and by not allowing the player to do that it just becomes a different experience.

[DP50] If you give a player a gun and put them in a room full of mutants then they're probably going to start shooting, which means you can play with that expectation, but its far better to let the player make those choices and to put a subtle clue in the environment

[DL24] But I don't think it was done to challenge it, it was really because we wanted to make a scary **Alien** game. It was that simple. Once we were doing that it's great to go, "what can we do that's new and interesting."

[GK15] And even what can sort of happen to your mind as you're like confronted with these sort of horrifying realizations about what you're doing. So the kind of psychological aspect of the game [**Spec Ops: The Line**] I thought was really interesting and surprising because it's just not expected, I think, in a military shooter.

[GK31] On the surface, you know, **Bastion** is a game about saving the world, and we deliberately leaned into this like generic... this like classical idea for a fantasy game right. The 'Save the World' story. It's the oldest story in the book when it comes to games. But we knew that the game wasn't really about saving the world. We knew it was about something else and we wanted players to discover that for themselves and for that... we wanted our game to connect with people who played it and that the narrative was a vehicle for that.

[GK40] In **Transistor** we were pretty interested in playing with the player's sense of agency. As part of that experience and having them stop to consider what exactly was their role. What were they doing really? And because that's a very interesting question that I think is asked by all games, Intentionally or not 'who are you in this game? What is your level of influence on the world of this game?' You can answer that about any game you know from **Pac-Man** to **Bejeweled** or like a big roleplaying game or whatever. It's interesting to think about, like in any given game, what are the constraints of what the player can do?

[LP21] I don't know. One reason has to be because I really don't want to make a game that people are familiar with or have seen before. And so I would never make a platformer or a standard shooter or something that... something where you could say, 'it's like this game only better.'

[LP27] Your job is to check documents and make sure that there's no mistakes and let them in or deny them from entering. So that to me is a really nice structure because it allows, as a designer anyways, it allows me to surprise the player a lot more because they're focused on this one relatively simple thing that is well-structured and well-defined and it is established right up front. There's no question, what you're doing in these games, right at the beginning, and then they're sort of preoccupied with that task. So what happens in the narrative above that, or intertwined in that, can surprise them and be a lot more interesting, I guess, and subvert what their expectations are.

[RP29] And players found that very frustrating, they didn't like being out of control, it was hard to make that look good. This is problematic for a lot of reasons. So we curbed back that and we gave more control of the character to the player. But on the IOS version in particular, Hope does have a little bit of a mind of her own.

[RP32] Right around 2011 it was a very radical idea we were pushing for. By just saying that players and consumers with iPads and iPhones would want to play anything with narrative on it… Mostly what the thinking was, and still kind of exists today, is that mobile devices or mobile games and iPad games are only for the time that you're standing in line at **Starbucks**… and we were basically saying like, 'no we believe that people would... they do also curl up on the couch and play these things… we want to take a risk on a more long-form narrative'.

[RP39] She's now on her own. She's now reached this point in her life where she can make decisions, you don't have to be her caretaker anymore. So yes, I mean, I think you nailed it. Which was what

our intent was. And I'm just really happy we followed through with it because it is a pretty gutsy idea. People online… like people were really upset with us about it.

[RPR13] It was always going to be hard, I think, with such high violence, high action gameplay, and it is very difficult to marry any kind of character to that kind of violence and action that you would get in games really, because games have their own sort of curve that's very different from movies.

[SG26] These are two sides of the same coin but the way I would think about it more is less of questioning the tropes and the assumptions of the existing genres that those form are used for and more of saying "what else can these tools express?" One of those, I think, is more directly in dialogue with what's already been done and kind of saying, "look at this thing that these games normally do, we're going to critique that via this game." The opposite side of that I think looks at all the ways these tools are normally used, but says, "look at this other thing that you can construct with them that's differently valuable and that's cool."

[SV25] I've kind of made two games like that now where you're not the hero. People can pretend in **Walking Dead** that they're the hero, but they're not. They die… That happens in life, and it's really difficult for us as a species to get our heads around. And I like exploring that stuff in games.

Player Interpretation
General reflection on how players interpret or receive a story, how interpretation functions in a digital medium or how storytelling leaves gaps for the player's imagination. This includes interfacing with fans and dealing with the game's reception, including unintended reactions, misunderstandings or resistance to the game's themes or message.

[CG5] So that's kind of like a distilled list of key points, but so much of **Fallen London** is told obliquely… I don't know if we'd ever have a character say, 'there's a snuffer in New Newgate' but you can put together that there is one, by the fact that the candles go missing and one of the guards is behaving weirdly and all that kind of stuff.

[CG10] So we can have a character who will give you some information if you've got an outlandish artefact and we don't have to expressly say you're giving him the statue in the shape of Mesoamerican bicycle, but the player can put that together – they know that's where they've got the outlandish artefact and that's what's in their head when they're passing it on to the non-player character.

[CG32.1] I'd be wary about calling our stuff authored. It is definitely authored, but one of the things we are very careful to do is to leave space for the player to contribute.

[DG31] And I found it very hard to balance that later, was because often you would make the connection in your head and as far as you're concerned you've done the work and so you don't think to take that extra step of taking the two notes and combining them so the character knows it as well. Yeah, it's something that was this disconnect that a lot of the players had... when anyone got stuck in a **Blackwell** game It was always because they forgot... they did not connect two clues.

[DL46] [**Alien** is] a realistic world with a fantastic alien, the alien is the magic in it if you know what I mean, so everything else has to be real. That's what the film does really well. It's so down to earth… even though they are in space. It's not a fantasy space film, you can imagine it happening, you can understand these people, you can recognise it. Then you have the magical creature that's the alien and its completely unknowable. So we try to stick with that.

[DL53] So you think it's going to be a horror game, but it's not. Then you're sucked into that world. Before you realise it, and it took me a while, I kept waiting for something to appear or make me jump, I was totally sucked into the world. They replace the horror with mystery instead, and emotional mystery.

[DP33] I mean we had people come back and going "it's obviously this," and then someone else is saying, "it's obviously completely the opposite," then that means you're in an interesting place in terms of storytelling, that you can have that kind of discussion and division on how its interpreted.

[DP34] Um, I think there's always fundamentally a player shaped hole that you have to fit into when you play a game, and that's about understanding the mechanics of going, "I know what I have to do in this game in order to play this game," but there's also a lot of subtle clues in there of, "I know how my imagination has to block into this game in order to play this game and I can't". And a lot of people talk about Nathan Drake in **Uncharted** and that dissonance, and I think there's always that problem in games. If you're trying to box the player's interpretation your either go into full on exposition, "you are this, you are thinking this, you are doing this," in which case you limit the imagination space of the player, or you run the risk of that dissonance happening.

[ES30] So that sort of holistic approach to, 'I'm going to build up this whole story and then I'm going to come back and revise the different pieces of it until it gets to a point where all of those different elements are working well together,' and there are sort of the seeds of character gaps in there.

[GK1] So we're all kind of relieved that the initial response was positive because it's, you know, it's one of those things, you work on something in relative isolation for a long time and it's important to poke your head out of the sand once in a while and make sure that what you're going for is kind of resonating with people out there.

[GK24] The character doesn't really know what's going on and it made for a number of challenges in making sure that the that the story of that game and the central relationships in that game ultimately came across and I think it's kind of a more impressionistic game as a result. It's less literal and we kind of made peace with that and embraced it.

[GK44] Learn to articulate why something worked for me. Normally, you know, you ask someone 'what's your favorite game.' They'll say some game. 'Why do you like it.' Because it's you know 'that game is sick' or whatever. Like let's dig into what 'sick' means.

[LP20] I don't like reading a lot of stuff, but what I do like is when my imagination is sort of lit by something, by a book, or a game, or a movie. So I'm given something that has a lot of holes in it or has a lot of vagueness or subtleties or missing information and I... to me it's much, much richer when I can fill that in in my own mind. And **Papers Please** is full of that, and **Obra Dinn** is overflowing with the same thing, where I try to plant seeds that are going to make the player think about something in a way that gives me more credit than I deserve, because the player's mind is wildly more powerful than anything I can put in a game. A really good example is the night time budget screen in **Papers Please**… And so to me that's absolutely key to anything I do production wise but also narrative wise I think, just the player can make it a lot richer than I can, and that's one of the reasons why I don't like a lot of text, I guess, is because text nails down.

[LP26] I set up some limitations, some structure at the beginning of the game that made expressing the narrative very very difficult, actually. You can only get a nugget of story in one of those flashback scenes and you can only go to a flashback scene when somebody dies. So I need to express the entire story to the player… everything that's happening, killing 60 people on this fucking boat, has to

happen in these little snippets. When someone dies the number one priority for me is to just communicate with the player what's happening so they can sort of put the pieces together.

[RP13] There's a couple of hints there. One is at the end of Episode Three if you listen to the end credits there was a hint of her going away, being taken some place.

[RP17] So generally speaking we kind of broke up the game and the narrative into three parts, which is a pretty common approach with screenwriting and just storytelling generally, which is you have your A-story, which is your plot, and we fought really hard to make our plot as simple as possible. And I think to our credit and long nights we were able to say, I think with a certain degree of certainty or with a high degree of certainty, that the majority of players who play our game understand the high-level plot, which a lot of games can't say.

[RP34] it's been really fun to see the reactions from players, especially after playing episode 5, and seeing how people love it or they hate it, and they wanted Hope to do or they wanted Hope to do that. And me, just have a big smile on my face thinking, 'that's the whole theme of the game,' you know, that Hope is alive, that players are not Hope. And some people get it. Some people don't and that's OK, and that's OK.

[RP40] So then if she was exposed to the violence on the tape then she'd be more open minded to I think Zager's approach, is what our thinking was. And Mireille's world view was a little bit more controlled and nanny state... if she wasn't exposed to that level of violence then she might agree that there doesn't need to be any bloodshed and this could all be done through political means.

[RP42] Because you're asking about how we do our workflow… I turned on the recorder while we're in meetings and it's just clips of us arguing all the time. And so it's a pretty good insight into like how we built the game. It was very very much uncensored.

[RP49] And so we wanted players to be overwhelmed by the amount of information that's on the screen that they had to have access to, as something of a parallel to what I would imagine the NSA feels like when they look at all the data that they've been able to collect and how do you parse through that, right?

[RPR25] People hadn't been given the whole context for the scene... They were just seeing bits in a trailer and filling in the gaps. And no one had really, because of when it come out, had actually played... or very few people had played that entire segment, so they didn't really know the context of it and obviously there was some things said in the interview about it that were just not accurate.

[RPR28] I Think it also sort of got put across in a way that this was somehow the pivotal moment for Lara in terms of her character. And it's like, 'OK this is the first time she kills.' But this isn't like you know Spiderman getting bitten by a spider… She goes through lots of other challenges. It was never meant to be... it's the first kill but it's not, 'Oh, you know, Lara's sexually assaulted and then she becomes a badass, that's never the narrative that we were looking to spin, nor do I think it was a fair spinning of it.

[SG11] but there are these other kinds of micro interactions that are more like the actions of an investigator or a detective that are about finding and discovering and putting the pieces together within this space that is arranged in a certain way when you arrive and that you've drawn conclusions about by the time that you leave that can also be really cool and unique to what games can do.

[SG12] something that we always wanted to do with **Gone Home** was to say a lot of the game, a lot of the experience, a lot of the value you get from having played **Gone Home** happens completely in your head and the game doesn't acknowledge it at all.

[SG24] We as the designers and the writers of the game have to say we're in on the joke with you. We know what experience you're having based on what's on screen, and we're going to acknowledge that and do the work to say yes this is what you're seeing, but we need to acknowledge that and say but here's what the game is really about in a way that feels legitimate and that feels like it walks that line between consciously acknowledging the player's expectations and then turning them towards this other thing that feels legitimate and doesn't just feel like the game is trying to tell the player that they're having a different experience than they're really having.

[SV12] The plot of **Firewatch** doesn't really change that much but the meaning that you imbue in it and like the reactions you have to the story as Henry I think vary really wildly and people have very different feelings about the game because of that stuff.

[SV28] Like **The walking Dead** has two endings basically, but Clementine is still in the field at the end. I find that stuff to be really interesting, where Clementine's in the field at the end no matter what, but like what you feel or think about it, or how prepared you believe her to be, and how positive that outcome is, is totally your own creation.

[SV36] My initial reaction was to say not at all, because I don't think the game gives you the tools to express that very well, but it's obviously sort of inherent in the set up, so… I think it's a totally valid read if someone were to say, "I think Henry is actually much more in a… I think that Henry is an unreliable narrator and a lot of things that happen in the game are constructions and are his mourning and are his brain trying to get over a traumatic event." Are PTSD basically. And I would say, if someone were to tell me that, I would probably not refute them because I feel that would be me robbing them of a very interesting personal take on the story, but it certainly wasn't…

Player relationship to avatar

Reflection on or discussions about the player's relationship to the protagonist or avatar, including practical consideration of how to exploit the language of games to create an empathetic effect, or conversely to question that relationship. Includes reflection on how to keep players immersed in the character.

[CW23] If we had something that was just a comment on the world and the player happened to go through another trigger that was a very important piece of dialogue, that one would be higher over the others and it would play instead.

[DL26] One of the things is when I was doing the writing, what we'd do is me and **Will** would write the script and **Dan** would write the script, and then me and **Will** would sit down with the level designer and go through the dialogue, and the level designers would just say, "look this character shouldn't be talking right now because the alien is around or the player is going to be scared out of their mind, so they're not going to want to hear this piece of dialogue," so we can see where we can move it or see if it's important.

[DL29] It's [about] trying to match what the player would be thinking with Ripley.

[DL48] And she ran down all the flights of stairs and I think she went around the block twice, and we had a bunch of people holding the doors open and shouting, "she's coming through!" And then we

shut the door behind her and recorded the dialogue and she was just exhausted. It's so important to get the character in the same space as the player.

[DL50] There was the sense that we didn't want a real macho character, we wanted a really relatable character. She's like what we'd be like if we were faced with a horrible monster. It's about making her fit what the player is feeling and what they can do, in terms of her abilities. She's a bit more talented than I am. She can do loads of engineering and shoot a gun. But we also wanted to make sure shooting a gun wasn't easy. That's why there are so few weapons in there, they're not FPS level weapons. They're hard to use and won't last long and they'll pull down the aiming. So we just wanted to make sure it wasn't a typical videogame character.

[DP32] the moment you decide you're a mote it takes on this meaning, how do we keep the player bouncing so they can never settle on an absolute position, which means that they are constantly imaginatively engaged in what's going but, oh god that was difficult!

[ES20] I'm interested in allowing the player agency over things that are either happening internally, emotionally in their protagonist or that are happening at the social level. So I've done a lot of work on procedural modelling of social interactions and conversations and those kinds of things.

[ES27] Well so I think there's kind of a continuing arc in a lot of my work, is how do we create characters that the player believes have some interior state of their own, right?

[GK35] And trying to help that person despite the harm that they try to do to you... and games ability to create like empathetic experiences to make you feel in a situation not just sympathize with a character but empathize with the character, I think is very very powerful. And so really setting up these opportunities for the player… for us is, it's difficult to set up those opportunities. But it's such an exciting part of the process for us.

[GK39] …looking for those kind of opportunities as they come up in making players feel more connected.

[GK41] She's a character with her own agenda, as is evidenced in my opinion from the earliest moments of the game. And we wanted the ending to underscore that, where the partnership between her and the speaking character... their ability to communicate with one another is quite limited, and the speaking character may have an impression of what she wants and what she's thinking. But he doesn't really know for sure.

[LP22.1] I think that interactive media especially has this ability beyond non-interactive media to put players in other people's situations, to sort of help them understand something in a way that's much deeper and more lasting and effective than just reading about it, or being told about it, or seeing it… So I think by putting the player in that situation, by putting them in someone else's shoes, and doing it right so that you're not just telling them things are going bad, you're sort of crafting it well enough that they can feel the pain from these decisions. That's super powerful and really a really important part of interactive media. I think beyond non-interactive stuff.

[RP28] the thing I was getting most stuck on was this idea that the player is not Hope and that Hope is not the player, and that giving her the sense of being a smart autonomous force to a certain degree, and then also giving the player the amount of control that they expect out of a videogame, and striking that balance is very difficult.

[RP33] Well it's intimate for the sense of like… when you talk to her like… we try to have these scenes we're calling FaceTime scenes where she's really up close and personal, having like a voice chat with you or a video chat with you. And those are really paramount in terms of trying to get players to really connect with hope as a character. And so that was I think probably the biggest thing when it came to really utilizing the screen in front of you, whether it's like the iPhone or iPad, is investing a lot of time in facial tech

[RP37] And I kind of still feel like, it's sort of like this weird crossover that's happening that I don't quite understand. And on paper I would expect it not to work, but it continues to work over and over and over again for other games, so yeah I'm still very much like trying to figure this whole thing out.

[RPR20] It is an empathetic medium, you're stepping in the shoes of another character. And I don't think we're making the most of how powerful that can be.

[SV23] We just wanted the game through its storytelling and mechanics and through the success of its character relationship to be able to create the disappointment inside the character that you would be feeling if you were him.

[SV34] So for us I don't expect you to like want to be him because I think he's a hard person to aspire to be, but what the game is concerned with is can we get you to, even if you don't like him, even if you can't 100% relate or you don't find him aspirational, can we get you to care about him? Can we get you to have some empathy? And that's the thing that I find to be… that's the goal. So everything is in service of that, not are you him or aren't you him.

[SG21] Empathy is about knowing and understanding someone who's different from you. When you meet someone in real life who has a different perspective or has lived a different life to you, and you actually get to know them as a person and realise that they're a whole person that has gone through these experiences and now you know someone who's had the experiences and they are someone you can relate to or that they have different perspectives than you do but they have reasons for that, then people like that aren't just aliens that believe these things that are counter to you own outlook, then that gives you greater empathy for them.

REGARDING CHANGES IN CULTURES OF PRODUCTION AND CONSUMPTION
Moving the focus out even further to the macrostructure of the industry in which the studio is embedded, this theoretical construct organises several themes around changing attitudes to games in a broader historical context, and the changing nature of production cultures in the present moment and industry theorising around their driving forces.

Relation between Indie and AAA
Reflection on the larger structure of the industry, especially the relationship between large AAA studios and the indie sector and what it means to be indie or AAA. Also includes reflection on team size, and especially resources and creativity within this context.

[CG34] I think the extreme version of authored storytelling would be not allowing the player any choice, and I think a lot of the big AAA games are like that…And that's not what we're doing, were trying to make a space for the player to inhabit and populate and put their face and voice to.

[DG1] I'd call it commercial because I used to just do free ware stuff, so when I charged money I would call that commercial.

[DL56] Stories are just becoming really important now I think. Because people respond to… when it's done really well, like **Uncharted**, **Last of Us** or **Gone Home**… I think when you do tell a good story people realise how important it can be now. You can do an indie game as well and you may not have as much money as everyone else or a big team, but you can still make a great game if it's got good gameplay and a good story. A good story just needs care.

[DP9] I think it coincided with the indie explosion, which really helped as well, because suddenly there was a route to market for very small projects and small teams, so that changed the kind of landscape as well.

[DP22] But with small teams, you make the game you can make, and it's really easy to find those edges of it, but you kind of go back and go, "well, **Firewatch** is a handful of people and we're a handful of people." It was great because after it came out we were like, "there's an awful lot we can learn [from] this game."

[DP71] And that's really challenging for small teams who've got storytelling aspirations because you're probably never going to develop that, and its why **Frictional** have done so unbelievably well because they own everything… and I think that is kind of the Holy Grail with most small studios is do something without compromising what you want to do... But it's not going to happen with a publisher.

[DP57] I think designers are curious, imaginative people. Most designers, especially if they're working on small scale, the reason they are working on a small scale is because they don't want to just make cookie cutter game stuff, a lot of them worked in that and then got out of it or deliberately chose not to be in it, because they're going, "well rather than replicating someone else's game I'm asking what if we do this? What if we do that? What if we change this?" I think it's always an element of research and questioning behind any interesting design process. I think it's not done in an academic way, because fundamentally most of those people are still operating commercially and if you're operating commercially it's very difficult, there are different sets of agendas where even if those things may run parallel and ask the same questions.

[DP58] If you're operating commercially it's very difficult, there are different sets of agendas where even if those things may run parallel and ask the same questions.

[ES25] Like most AAA games are just... you know there's a very linear story, but you just have to get through it by meeting these challenges and that also can be a way of making the player viscerally experience something about the difficulty of a particular journey, or a particular story.

[ES32] I mean I think there are a couple of issues. There's an apparently process based issue when it comes to bigger video games. Well actually there are several. But one of them is I think writing a really well rounded and nuanced character requires a certain amount of time and I mean that not just in the sense of you need to spend a certain number of hours writing it, though that is part of it but also it needs... I mean at least I find... you need to kind of have the character in mind in the back of your head for a while in sort of calendar months right like you need to be thinking about this person and who they are and how they react to things and what they would do over some duration of time. And a lot of the sort of game projects are... I mean they're first of all not always even leaving that much room for the writer at all in the first place, right?

[ES34.1] So you know the question is just are you willing to risk doing something different? And I think we see that, not in the AAA space, but I think we see that sort of percolating upwards as an option, right?

[ES36] my feeling about AAA is that they, because of their risk aversion which is inevitable when you've got that kind of money on the line, they basically are never going to do some of these things until they've seen them proved out, basically had a full roadmap of, 'here is how you do this, precisely how you do it and how you sell it,' presented to them on the indie size. You know I think a lot of AAA benefits from research work essentially done for them for free by the indie space.

[ES39] But I would say most games especially in a more AAA space aren't doing it that way, they're coming at it from the other angle of, 'okay here's our level that we've designed for, you know, sort of gameplay reasons.' And then, 'here are the spots where somebody has just come through a difficult boss or gotten past the important gate or whatever.' And that would be a good place to give them a little bit of pacing and a little bit of downtime or reward them with seeing something interesting.

[GK21] And as a small team we didn't have the bandwidth to do like an incredibly visual form of storytelling... we couldn't do like a very animation heavy game with like wordless storytelling. So the idea of voiceover came up as like as a potential solution. People are often surprised to learn this in my experience. The narration in **Bastion** was not something that we had in mind for the project from the start, the game started development in September of 2009 and the first voiceover recording was in January of the following year, so it was a number of months into development.

[GK27.1] I like to say that the more people who are involved in a decision... for each person who's involved in a decision it's another opportunity for someone to say no… But yeah I think in our case having very few people involved in the stories of our games has allowed them to be as kind of specific as they are, for better or for worse.

[GK28] being a small team we don't tend to have too many situations where we have too many cooks in the kitchen or where something gets like watered down. It could just be what someone on the team really wants to do. And we try to do that in every discipline, by the way. You know when it comes to the music and audio for example the buck stops with **Darren Korb** who does our music and audio.

[GK30] There are many advantages to being bigger and having more resources, but it means in some respects that you have to plan more, so on bigger AAA projects I think there tend to be fewer recording sessions, right? You may have several of these big recording sessions where you booked all your actors and you have several days in the studio and you're just going to like hammer out a big script and kind of record vast swaths of the content of your game at once.

[LP4] For triple A, right? 'Sit down and model these trees and this house and stuff.' Which I mean is fine, you've got to start somewhere.

[LP29] And you know you see the experimentation you see in the indie games, or the games that don't have a lot riding on them, but that percolates up to the AAA guys. You know people from Indie go to AAA, or they see that they enjoy these games they were playing at home and they want to incorporate elements of that into their AAA title, and so that sort of takes over, and I don't mean to say that straight up shooters are not going to disappear.

[RP4] You know in the [voice recording] booth on **République** was the first time where I didn't have to worry about doing something really crazy and then going back into the office and getting yelled at by anybody, you know? Like it was, for better or for worse, it was... I had final say on things so that was an exhilarating experience. It's kind of scary but it was nice to have the gloves off and be able to do whatever we wanted to do.

[RP26] It was mostly story driven, and I took that to **Bungie**, who was doing a publishing initiative at the time, and we went pretty far with them. They were very serious about the idea of publishing and funding **République**but when they came back with the initial feedback they said, 'hey, what's your 30 seconds of fun?' It's a very **Bungie** thing to ask, 'but what is your gameplay loop like? We want to see more action.' So then we went back to the studio. We loaded up **Unity** and I moved the webcam up into a security camera inside of unity and all of a sudden we had a game that looked like **Resident Evil** one with an isometric view, that kind of corner room camera. And I thought, 'OK here we go. That's the game. It's about surveillance.'

[RPR5] but with something like **Tomb Raider**, it's a huge massive team, and so roles like narrative designer... they often become a conduit between me the writer and the designers, and they're sort of briefing a writer about everything that's happening in the levels and writing briefs.

[SG17] So the thing that gave us the licence to do that way was that we were writing our own checks basically. We were an independent studio and we didn't have to get permission from anybody to do that. This isn't the kind of project that would have got made under the supervision of a large publisher because the scale of the game is small, it was PC only when it came out, it was about a subject matter that, you know, hadn't been touched on in a mainstream game as the core story of the game, and there's not traditional gameplay structures in the game that you can say, "this is an FPS, this is an RPG, this is an XYZ" it was just sort of like, "here's this thing that we're making, it's weird. We think people will like it because we think it will be good. I don't know." [laughs] You can't really get a budget spreadsheet approved based on that.

[SG28] People that used to work in AAA or used to work in these studios that had fallen out of the middle of the industry said... experienced developers that have the luxury of being able to strike out on our own because we're still relatively young, maybe we don't have as many obligation as some people would – "well I can't just take a risk on starting a project because I have a kid and a mortgage" – and also the technology and tools becoming much more accessible. Unity becoming a relatively affordable, relatively robust engine for making smaller games, or **Game Maker** etc…

[SG30] It's an ebb and flow kind of thing… We made **Gone Home** and then a couple of years later I got to come out and introduce our next game at the stage of **Microsoft's** press conference at **E3**. That's not something that a game like ours would have done before **Gone Home** had come out. It's that ebb and flow of the new upstarts becoming part of the establishment and then the market changing and new upstarts having a new avenue into putting their stuff in front of an audience and that's really cool.

[SV1] It's the dream to get a game out that we're in complete control of, that was just ours, basically, and then be able to afford to keep running a studio because of that.

Changing attitudes to games as a media
Reflection on shifting attitudes to games both within games culture itself, including debates about what constitutes a 'game', or attitudes towards games in larger society. Includes reflection on the development and growth of games as a creative medium and historic changes to the production apparatus or dominant tendencies of the industry.

[CW58] Of course games are a new media. Games have been around for a very long time, but when you compare that to books, game are still a very new media. I think it's just because people are learning. Games really started as a fun interaction and gradually evolved over time, and storytelling

is becoming way more relevant. Of course, you still have games that are just about systems and mechanics and the point of the game is to play it.

[DG25] She [**Jennifer Hepler**] was a **Bioware** writer and several years ago she said how she wished she could... You know in many games you can skip the story to get to the combat sections, she wanted to skip the combat to get to the story sections, because for her the story bits were the game and she wanted to get to that. And I was thinking... she got a lot of flak for that and it was really horrible.

[DG33] There's this narrative about the point and click adventure, you know the 'genre', that they died and they're coming back, they're dead they're not coming back. Or like there's a resurgence of whatever. And people have been saying that for like 15 or 20 years… So as far as I'm concerned they've never really gone away. I think that the weird thing about them is that... Like there are other game genres that kind of have that same narrative where it's like they died and they're coming back. I mean you've got like roguelikes that were like dead and now they're really popular, shmups things like that. Real time strategies were dead for a while now they're coming back. But no one ever says the same thing about them. It's always adventure games that were dead or are coming back or whatever. And I don't know why that is. I find it absolutely fascinating.

[DL49] One thing is it's a classic horror thing to do is to have a female protagonist and also I don't think there's is enough female protagonists. It felt right for an **Alien** game. Ellen Ripley is such a strong heroine, it felt important that we should have one too. It's kind of tricky… It ties into her character in that we wanted to make her an engineer so she's making stuff and working with terrible tools, but I don't think… I mean it's funny because female protagonists are usually used for horror films, but all the stealth stuff is more to do with the gameplay. It's a bit tricky. I read a lot about female characters in horror. There's a great book, **Men, Women and Chainsaws** [by Carol Clover] and its really great. It talked about the whole female protagonist in horror films and how the monster is usually genderless.

[DL57] I mean, not that they didn't try before but I think also games are still relatively young and were getting to grips with it now and seeing what we can do. People are getting more confidence as well. I think at the moment what's nice is that I think the indie scene and AAA, it's almost like films where it's very normal for you to have a lot of smaller games and play them both at the same time. People aren't just playing the big games or the little games anymore, with **Steam** and stuff like that you have much more access to it. So they kind of feed off each other. Indie games get a lot of room to experiment and then AAA games can see that it works and that they can do it.

[DP62] The PC market has gone from being this underdog, left field space of real experimentation, and it was where the interesting stuff was happening, to suddenly it feels quite entitled and it's all about early access and survival crafting and the market places are bloated… And console seems a little bit better because there's less titles on it and its easier to stand out. It's hard to develop for PCs now 'cause of the spread, the diversity of hardware.

[ES6] Well I don't think there's a bright line between them and I get a little frustrated with some of the arguments about what counts as a game versus what counts as interactive fiction, just because often that argument is really about community gatekeeping of some kind, rather than about sort of let's have an abstract conversation about structure.

[GK7] I think like the quality of the craft in storytelling in games has on the whole improved. I just finished playing **Uncharted 4** the other day and it's like, it's just a... as a feat of interdisciplinary development and writing and like all the disciplines that go into creating a game, it's spectacular

stuff, it's crazy, you know? It wouldn't have been possible on older hardware et cetera et cetera. The technology enables aspects of the storytelling in that game.

[GK9] I think there is more conscious common understanding that it is like valuable when they do so. I think story, you know, has historically often been seen as sort of an afterthought.

[GK45] The wonderful thing about games is that they're just a completely boundless medium that's only characterized by, I think, interactivity being somehow central. Other than that, anything goes. And in our case, we chose to go down this road of having the narrative be a key component, but that is certainly not the only way.

[LP5] And I think games are more and more ubiquitous and especially creating games is more and more ubiquitous. It's just all filtering down, so more people are making more games. So I feel like the improvement in the narrative side is going to come pretty naturally, actually, just by the sheer volume of games and people making games.

[LP31] Yeah, I mean things are moving so fast right now. it's hard to say things will ever settle down. Actually. you know like movies I'm sure we're crazy for the first 40 or 50 years. But movies, things have really settled down there, there's not a whole lot of innovation in film. I wonder if we'll get there.

[SG1] Something about games is that they have such a broad range of forms to them. I mean it isn't like it's impossible, but it would certainly be far out of the norm for a film or a book, well, or a novel let's say, not to have a narrative or for the fiction not to be important, but games come in so many different forms that for some games it truly just… the idea of narrative or fiction really, practically isn't relevant at all. So I mean it's interesting that when you're looking at making a game, just even thinking what the function of the story in your game is, is the first question. How much do you need? How important is it?

New types of stories
Reflection upon new types of stories being told both in terms of form (experimental structures), genre (breaking out of the core genres) or theme (narratives addressing marginalised subjectivities or unusual experiences). Includes comments on why this might be happening.

[CW59] And it's the right move that games are taking, especially with games taking in subject maters that weren't in games before and telling different stories and having females as main characters, which of course we have had across games, but they've evolved more so.

[CG36] I think what's changing is now you don't need to have a massive studio and retail connections to release a game to the public, more people can make games so we're seeing different sorts of people making games and different sorts of interests so were getting different sorts of stories.

[CG37] But that allows for a whole bunch of stories that you'd struggle to tell if you had to hang RPG or shooter mechanics on the side of it. And yet it's really interesting. I played **Firewatch** recently and really, really loved it.

[DG35] Also, the tools to make them are a lot more accessible than they used to be. So you get a lot of interesting things happening because small teams with very limited budgets can make them. So you're getting a lot of great little experimental things.

[DP66] I think it's becoming better, slowly. I think people like **Naughty Dog** are as responsible for that more than anything else. I don't think it's becoming more experimental, mainly. I think it is baby steps. I think the idea of that very kind of fuzzy storytelling is still scary as hell to big name developers, because there's so much riding on it… It's amazing that you have people like AJ, who's a non-white character in **Far Cry 4**, you do you have more females… so that kind of stuff, that's where it's changing slowly, not fast enough but it is changing in terms of the types of stories that are told.

[DG28] It helps make the story stronger and when you're... when you speak from a personal place, it resonates more with people experiencing it. Because they can feel that whether it's obvious or not, they can feel that. The games I've written where I don't feel that passion it's obvious, and it reflects in the sales as well.

[DL56.1] I think it's like a snowball effect, you just need a few games with good stories and people respond to it positively, more people do it, then suddenly everyone's trying to do a great story.

[DP15] We wouldn't have commercialised it if it already hadn't have had such a standing in that community, because we knew we couldn't do much marketing.

[ES5] Like there are a lot of people now using **Twine**, a lot of people doing **Choice Script**, a lot of other things where they don't necessarily have that background with parser interactive fiction, they might not have had any contact with that community at all, ever. And they're doing their own things and so the world of interactive fiction has just become much more dispersed.

[ES57] So a lot of it I think has to do with the growth of the indie scene. I think there's more room for people to tell different types of stories and more room also for different types of people to tell stories. If you see the distinction there… obviously there are a lot of sort of economic and technological reasons for the growth of mobile to Steam to etc. why that happened… But I think there's a real genuine desire that a lot of people have to have particular narrative experiences that games are not yet giving them, or most games are not yet giving them.

[GK6] I think, you know, that values change over time though. You know, among the press and among game players, and the kind of content that's depicted in games, reflects that to some extent there's a much wider variety of types of games today than there were you know 15 years ago when it was more console dominant, I guess, and more like sort of so-called Triple-A studio dominant, and these days there are just many more smaller studios making different types of games.

[GK8] In terms of the kinds of stories that games are delivering… again I think, you know, in a lot of ways the horizon is broadening. But from another point of view I feel like games have always told a wide variety of stories. Some of those examples are just more visible these days than they used to be and they can surface... they can become popular on steam and stuff like that.

[GK10] I think it's due to the, you know, the broadening... I think it's due to the overall size of the audience increasing, just the quality standard increasing over time. I think people... I think human beings are discerning about quality as... Which again, I don't know that everyone agrees with that.

[LP28] Yeah I definitely think so. I mentioned earlier but there are more games now, more people making games. There's a lot more diversity in games. It's easier to make games. There's not that technical sort of hill that was impossible before. And really importantly it's easier to sell a game now… But now with **Steam** and **GOG** and you know all this online distribution stuff, anybody can make a game and importantly anybody can sell it and then you can always find an audience, almost, for what you're selling if you play it right. So that has basically just broken open the gates for what

you can do in games successfully. And so I think that's a huge change in a lot of ways just makes it easier. **Unity** makes it really easy to make games now, there's a lot more technologies to do that sort of thing.

[LP30] I love that we get all these kinds of new weird games because I personally value sort of uniqueness or innovation above almost anything else.

[LP32] But yeah, I think VR changes a lot of things because VR goes way beyond games. So it's really hard to predict what's going to happen.

[RP51] It's difficult to market a strictly narrative game with a very static beginning, middle and end in this era. Like that's not to say that some games… they won't find a lot of success that way. But for these kind of traditionally narrative driven games, whether it's you know **Bioshock** or just the original **Metal Gear** games, where were done in 10 or 15 hours, or even like **Uncharted** for example you know, there are a lot of success stories, but there's a limited reach to them now in terms of how you monetize them. What is expected from the users in terms of production values and this whole idea of, you know this player engagement and or daily engagement from users.

[SG3] Yeah it much more started from our team that founded the studio – we'd all worked on the **Bioshock** series together and our basic thinking was that if we effectively just took the combat out of **Bioshock** and took out the **RPGish** elements and stuff, if it was just the aspect of exploring an immersive environment and finding the story there through environmental storytelling and audio diaries… if that was going to be basically the whole game, or the heart of the game – the core gameplay – Instead of a side element

[SG15] But we didn't want to make it an extended cut or anything like that. For us it was just an opportunity to bring the existing game to new audiences and to fix some bugs or whatever, to make sure it ran well, but I think that **Gone Home** as a narrative experience, for what it actually contained in the game, was what we wanted It to remain as; just to give more people access to that.

[SG18] And we've seen games like **Dear Esther**, **Proteus**, **Braid**, **30 Flights of Loving**, and even stuff like the original MOD version of the **Stanley Parable**, etc. So there's an audience for these smaller games and so on and so forth.

[SG27] A lot of it is market and technology forces. There was this big movement within the industry, where there had been these mid-sized studios that were kind of between AAA and being totally indie that became being less financially viable at around the same time that some very high profile, small indie projects like **Braid** and **World of Goo** and **Super Meat Boy** and take your pick from between 2008-2009 – I mean **Bastion**, **Limbo** etc – started coming out.

[SG29] All these things I think conspired to say there are new ways to make games more easily, there are new ways to get those games to audiences more easily and there's this generation of developers who have both enough experience but also are fresh enough to the industry that, given the chance to make their own thing on their own terms and bring it to an audience themselves, they're going to take the game literacy they have and do things with it that we wouldn't normally see otherwise, which I think is really exciting and cool and why we've seen a bunch of fascinating projects come out over the last five or ten years.

[SV6] One is that the audience is maturing and widening. Your hurdle to be able to play games beyond having just the literacy of 'how do you press the buttons to make stuff happen,' is getting way less complex. You don't have to buy a console, you can probably play games on something in

your pocket to get you started at least. Everyone has a computer. The market is just so big you can… even if you hit a niche audience. Two is that the tool chain is stable enough now so that people like us aren't technical wizards, we're not **John Carmack**. We can sit down and make a game that competes on a professionalism level and a quality level with just about anything else.

[SV8] **Far Cry 4** just wasn't doing it for me. So I just think everybody's matured a little bit, but never the less it's pretty obvious that the content is lagging behind, so we see, from a business side, I think we see **Campo Santo's** ability to be at the forefront of this really hungry underserved audience.

[SV14] we were much more subtle and more nuanced, and less concerned about… we kind of had the mission at **Telltale** to make choice driven narrative games for the masses and we didn't really give ourselves that direction on **Firewatch** or anything we make, so I think we can just be more subtle.

Appendix D: Sample release Form

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Consent form for participation in interviews by games industry professionals

Introduction

This thesis aims to explore the extent of new approaches to storytelling that attempt to unify narrative and ludic (gameplay) dimensions in recent videogames. The interviews carried out here seek to analyse attitudes to the function and implementation of narrative within the game design community. To this end I seek to interview game developers working within narrative in certain key titles on the topic of narrative design and its implementation in both practical and theoretical terms.

Statement of consent

By signing below I agree for the semi-structured interview conducted and transcribed by Dean Bowman, and the data deriving from it, to be used in his PhD thesis with the working title 'Ludonarrative Convergence: A study of the function of narrative in recent videogames', and also works derived from it including conference papers, journal articles and books. The thesis will be published by the University of East Anglia in 2017 and will be publically available in their open access digital repository. I am aware that Dean Bowman also works as a games culture writer, but that he will not use my words within the journalistic context without express permission.

I understand that I will be sent the transcript to verify its content (I include my email below for this purpose). I also have the right to pull out of the study. My words may not be decontextualized in a manner that changes their meaning, but will be subjected to intellectual analysis with full scholarly rigour. I have the right, on request, to check the thesis chapter in which I appear before publication and the right to reply.

I verify that I am entitled to speak about projects I have worked on, or have cleared permissions with relevant bodies to do so. I reserve the right to withhold comment at any time. I understand that I may request anonymity in which case a pseudonym will be used.

I understand that ethical clearance has been sought with the General Research Ethics Committee (G-REC) at the University of East Anglia, and received, by Dean Bowman prior to carrying out these interviews and may be viewed on request.

Print Name ---------------------------

Sign -----------------------------------

Email ----------------------------------

Appendix E: First Point of contact Letter format

Dear [insert name here]

I am writing to enquire if you would be willing to take part in a PhD research project on the function of narrative in recent videogames. I'm particularly interested in gaining your insight on the project because you have worked on some games [insert names] that I find very interesting in regard to this topic.

A little more about the project: I'm looking at attitudes to the relationship between narrative and gameplay in recent videogames in an attempt to demonstrate the innovations I feel are occurring in the medium. I have already conducted a reception study of attitudes to narrative in the press, and now I seek to compare these attitudes to industry theorising around narrative within the game design community. Later I will compare both sets of discourses with my own readings and interpretations of specific examples within the games themselves. By adopting this three part approach to the topic I hope to demonstrate the breadth of current approaches to narrative within the medium and specifically how designers are attempting to integrate narrative in games, thus challenging the long standing polemic of narrative versus gameplay that has characterised game studies and the videogames industry.

The interview will be between 30-60 minutes depending on your availability and will be conducted via skype at your convenience [if subject is based in the south of England I might suggest meeting in person] but ideally before June 2016. Ethical clearance has been granted by the university (which must be attained for any study involving people) and I would be happy to supply this. If you are willing to take part, in accordance with university policy, I would need you to sign a short statement of consent.

The findings will be used as part of my thesis (which is due to be completed in 2017) and potential journal articles and conference papers, if this would be acceptable. According to new legislation and university protocol all material will be made publically and freely available at our university repository. I would like to make it clear up front that my project does not set out to critique individual practices, but is merely using them to explore approaches to the function of narrative in contemporary videogames. I am aware that you may be working on projects that are not ready to be discussed, and I promise to only include statements that you are happy with. You may of course reserve the right to not answer a question. To this end I would be happy to provide transcripts following the interview for you to check if you desire.

In the interests of full disclosure I also write and edit at the community gaming blog www.ready-up.net but assure you that the material collected via these interviews will only be used within an academic context. I decided to embark upon this PhD because of my passion for the medium and a growing awareness that games were taking more risks with narrative than ever before. I am really excited to speak to you about this topic because I feel that your work contributes to these innovations and I feel that your insights would be of value to the academic community.

Please let me know at your earliest convenience if you would be willing to be interviewed.
I can be reached at d.bowman@uea.ac.uk

Kind Regards,
Dean Bowman

Appendix F: Semi-structured Interview protocol

Thank you very much for taking the time out of your schedule to help me with my research.

As I mentioned in my [letter/email] I'm interested in looking at the relationship between narrative and gameplay in recent videogames. I hope that by speaking to game developers about their practices I can explore if and how contemporary approaches to integrating narrative in games are addressing or overcoming the tension between narrative and gameplay. I think it's important to consider industry discourses in the academic context, so this interview will be an important contribution.

I imagine the interview will last about 45mins. Is that OK with you? You can obviously stop at any time and you are entitled to not answer a question. After I have transcribed the interview I will send it to you to check.

Opening section
Ask some very broad, non-leading questions to give the interviewee the maximum amount of freedom to express their views. Initial questions are non-specific and personal, designed to build rapport as well as establish the developer's background.

1. Could you start by telling me a little about your role within the games industry or on [X game]?

2. Where did you develop your skills and what was your route into the industry?

3. How involved have you been on the narrative component of the games that you've worked on?

General attitude to story
Start moving into probing, very general questions to establish their stance on the status of story and gameplay.

4. How important do you feel narrative is to videogames?

5. In general how do you perceive narrative interacts with gameplay?

    a. [if they note a tension] Could this tension be overcome? If so how?

    b. [if they note a cross over] How do you see this cross over between gameplay and story working?

6. Do you feel the approach to story in games has changed in recent years and if so what do you identify as the catalyst to this change?

    a. Is there a greater or lesser level of experimentation or risk taking?

    b. Are these changes evident only in the indie or triple A scene or in both?

7. Do you feel like the most recent shift between console generations has had any significant effect on the way stories are told in games?

      a. [if yes] In what ways? Can you give an example about how it has affected your practice?

      b. Is this more or less apparent than in other generational transitions?

8. How do you feel narrative functions in relation to a game's spatial or exploratory elements?

      a. How important is a sense of immersion in the world to a player's experience of the story?
      b. How does player agency play into story?

9. How important is it that the gameplay reflects and supports the thematic concerns of the story? [I'm particularly interested if the designer evokes the term ludonarrative dissonance without being prompted]

10. What role does a game's systems and mechanics have in the telling of a story?

11. How important is quality writing in videogame production? Has this changed over time?

12. Do you think there is a specific type of storytelling specific to videogames and if so how does this differ from a film or book?

Industrial context
Now we move onto questions that pertain to the industrial context under which the developer labours, and what effect this has had on his/her practices. Also issues of transition or change within the industry are addressed.

13. [For Triple A] In your experience how has working as part of a large team effected the structure and implementation of the story throughout development?

      a. Can you think of a specific instance the narrative was altered due to pragmatic restraints and how was this problem was overcome?

14. [For indies] In your experience has working as part of small team effected the structure and implementation of the story throughout development?

      a. Can you think of a specific instance the narrative was altered due to pragmatic restraints and how was this problem was overcome?

15. In your experience how do the various roles in the development team work together to implement the story?

      a. Is anyone in particular more responsible for narrative?

16. What external industrial pressures most effect the implementation of narrative and why?

17. Does the assumed audience of the game have a strong influence on the narrative and in what way?

Specific uses of narrative in their games

This part of the interview now drills down to look at their own practices and specific examples of their approach to narrative and its implementation.

18. Regarding the earliest stages of the game design, do you tend to begin with story or with a gameplay mechanic, or something else entirely?

    a. If you begin with [story/mechanics] at what point do you begin thinking about [mechanics/story]?

19. Can you think of any specific moments in the games you have worked on where you are pleased with the relationship between gameplay and story? Why is this?

20. In [x game] you took [x approach] to narrative, why was this?

21. In [a specific moment] of [X game] this happened. Can you explain why you chose to do this?

22. In [x article] you have been cited as saying [x point about game narrative] can you speak about this in relation to specific instances of your games?

Theoretical questions
These questions are design to allow the designer an opportunity to reflectively speak back to the kind of theories that have emerged so far throughout this study.

23. Are you familiar with the ludologist/narratologist debate in academic game studies? And if so, which side do you fall on and why?

24. What do you take the notion of emergent storytelling to mean and how do you feel it functions in your own games?

    a. Is the emergent story more important than the scripted one?

25. What are your thoughts on efforts to make procedurally driven story generation systems (eg: previous experiments like FAÇADE, Chris Crawford's ongoing efforts or Ken Levine's current project)?

26. Janet Murray defines the four most important aspects of videogames as: spatial, encyclopaedic, procedural and participatory. Do you agree?

    a. [if not] What elements that you feel define videogames?

27. Jesper Juul categorises games into those of 'emergence' – "in which a number of small rules combine to form a wide range of interesting variables" – and those of 'progression' – in which "a series of separate challenges are presented to the player in serial form" Do you agree with this?

    a. [if not] Is there another way you would split videogames into broad categories?

28. Jenkins uses the term 'micronarrative' to describe how narrative elements might enter a game and be experienced by players at a localised level. Do you agree and if so how do you see these micronarratives relate to a game's overarching story?

29. Ian Bogost's has developed a theory of procedural rhetoric which explores how games use a "form of symbolic expression that uses process rather than language." Do you feel games can create meaning/narrative through their systems?

30. What role does the social aspect of games have to the player's experience of the story?

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