The politics of humanity: ‘humanising’ refugees through virtual reality technology

Moe Suzuki

Submitted for the degree of Doctor of Philosophy

University of East Anglia
School of Politics, Philosophy, Language and Communication Studies

August 2023

Word count: 99,737

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with the author and that use of any information derived there-from must be in accordance with current UK Copyright Law. In addition, any quotation or extract must include full attribution.

Abstract

There is a long-standing relationship between the concept of humanity and refugees, such as their representation as 'pure humanity' and ideal subjects of humanitarianism, their 'dehumanisation' in the media, and calls to be treated as 'human'. 'Virtuous virtual reality' (VR) (Nakamura, 2020) emerged in the mid-2010s as VR technology started to be promoted as uniquely placed to foster connection and empathy between users and refugees due to its technological affordances. This thesis identifies virtuous VR on displacement produced by a constellation of actors including technology companies, the United Nations, and news agencies as a site where what I call a 'humanising' approach to displacement manifests. This approach foregrounds the fundamental commonality as 'fellow humans' between refugees and the audience.

Using decolonial and feminist theories and through conjunctural and experiential analyses of four VR films on displacement from the Syrian conflict—*Project Syria* (2014), *Clouds Over Sidra* (2015), *Refugees* (2015), and *Sea Prayer* (2017)—this thesis demonstrates two implications of a 'humanising' approach to displacement as it manifests in virtuous VR. First, virtuous VR on displacement seeks to assimilate refugees into dominant 'genres of the human' (Wynter, 2003), reproducing the hierarchy of humanity rooted in modernity/coloniality. I highlight the dynamics shaping refugees' relationship to the category of the human, such as racialisation, gendering, and mobilisation of innocence through figures of children. Secondly, I situate virtuous VR on displacement in the current conjuncture characterised by the production of refugee/migrant 'crises' in Europe and North America, growing securitisation of migration augmented by digital technologies, the crisis of neoliberal capitalism, and the convergence of digital humanitarianism and philanthro-capitalism. I argue that the issue of displacement is instrumentalised to manage the crisis of neoliberal capitalism and to increase market expansion in pursuit of profit. Virtuous VR's 'humanising' approach to displacement therefore affirms and reproduces the modern/colonial order.

Access Condition and Agreement

Each deposit in UEA Digital Repository is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the Data Collections is not permitted, except that material may be duplicated by you for your research use or for educational purposes in electronic or print form. You must obtain permission from the copyright holder, usually the author, for any other use. Exceptions only apply where a deposit may be explicitly provided under a stated licence, such as a Creative Commons licence or Open Government licence.

Electronic or print copies may not be offered, whether for sale or otherwise to anyone, unless explicitly stated under a Creative Commons or Open Government license. Unauthorised reproduction, editing or reformatting for resale purposes is explicitly prohibited (except where approved by the copyright holder themselves) and UEA reserves the right to take immediate ‘take down’ action on behalf of the copyright and/or rights holder if this Access condition of the UEA Digital Repository is breached. Any material in this database has been supplied on the understanding that it is copyright material and that no quotation from the material may be published without proper acknowledgement.

Table of Contents

List of Tables 6

List of Figures 7

Acknowledgements 8

1. Introduction 10

1.1 We are not all human, at least not in the same way 10

1.2 Main thesis and contributions of this study 12

1.3 'Humanity' and refugees 16

Restrictive border controls and the emergence of 'humanising' approach to displacement 16

'Humanity': Universalised, collective subject 23

Decolonial theory and 'humanity' 26

1.4 'Virtuous VR' on displacement in the current conjuncture 32

The emergence of 'virtuous VR' on displacement in the mid-2010s 32

Empathy and virtuous VR 38

Syrian conflict, mediatised representations of refugees, and border politics after the 'European Refugee Crisis' 41

What is the current conjuncture? Production of refugee 'crises' under neoliberal capitalism 45

Post-humanitarianism and virtuous VR in neoliberal capitalism 50

1.5 Research questions and method 53

1.6 A note on the term 'refugee' 57

1.7 Chapter overview 62

2. Method and Methodology 65

2.1 VR as affective technology: Critical feminist approaches to affect 65

2.2 Embodied methodology for analysing VR films on displacement 67

2.3 Existing corpus of VR films on the displacement of Syrians 69

2.4 Four VR films on the displacement from the Syrian conflict: Selection criteria 72

2.5 Multi-level analysis of VR films 78

2.6 Conjunctural analysis 83

2.7 Situating myself in this research 86

2.8 Limitations of this research 90

3. *Project Syria* (2014): Political economy of VR technology 92

3.1 Watching *Project Syria* in 2022 92

3.2 Introduction 95

3.3 VR and empathy: De la Peña's "visceral empathy generator" 99

3.4 Network around 'the Godmother of Virtual Reality': the expansion of the VR market and the VR infrastructure 102

3.5 Emergence of virtuous VR: VR 'for good' 109

3.6 Border-industrial complex, militarisation, and VR technology: Empathy/killing machine? 113

3.7 Digital technologies and the modern/colonial world 120

3.8 Conclusion: Virtuous VR in as a response to the crisis of neoliberal capitalism and 'crisis' of migration 128

4. *Clouds Over Sidra* (2015): 'Humanisation' and profit-making through virtuous VR 133

4.1 A glimpse into Za'atari camp 133

4.2 Introduction: 'Humanisation' through virtuous VR 141

4.3 Capital accumulation through 'the ultimate empathy machine' 144

4.4 Centrality of young children: Feminised childhood, innocence, and humanity 148

4.5 Universal childhood: Restoring 'lost' childhood 155

4.6 The body as a container: Dis/embodiment in VR 157

4.7 Depoliticisation of displacement via technological disembodiment 159

4.8 Humanisation: Inclusion as assimilation 164

4.9 Conclusion: Humanising the modern/colonial order through virtuous VR 166

5. *Refugees* (2015): Immersive journalism as virtuous VR 169

5.1 Sea journeys towards Europe 169

5.2 Introduction: Contextualising the 'European refugee crisis' 175

5.3 'VR journalism' as virtuous VR: Content development and post-television journalism 179

5.4 Aims of Refugees: Providing a 'humane' perspective to challenge abstraction of refugees' lives and the dichotomy of 'us' versus 'them' 183

5.5 Experiential dissonance 186

5.6 Feminisation of refugee humanity and the centrality of racialised men in Refugees 191

5.7 Shifting from sameness/difference to relations 195

5.8 Conclusion: Immersive journalism's quest for monetisation 196

6. *Sea Prayer* (2017): 'Our' future is at stake? Limits of 'humanising' stories and reproductive futurism 199

6.1 Syria: From peace to repression and conflict 199

6.2 Introduction: Death of Alan Kurdi and immersive journalism 205

6.3 Philanthro-capitalism and digital humanitarianism: Google, *The Guardian*, and UNHCR 210

6.4 *Sea Prayer* as remediation of Alan Kurdi's photograph 215

6.5 "If only they saw. They would say kinder things, surely": 'Humanising' through

individual stories 218
6.6 Marwan and reproductive futurism 223
6.7 The figure of refugee fathers and reproductive futurism 230
6.8. Conclusion: Whose future? 233
7. Conclusion 236
7.1 Virtuous VR on displacement and mobilisation of a generic humanity 236
7.2 Innocent and feminised humanity, technological disembodiment, and experiential dissonance 237
7.3 Implications: What is this humanity 'good' for? 238
7.4 Contributions of this study 240
7.5 Concluding thoughts 241
Who speaks for the human? 242
Beyond the economy of humanisation 243
8. Abbreviations 247
9. Bibliography 248

List of Tables

Table 1: Characteristics of *Project Syria*, *Refugees*, *Clouds Over Sidra*, and *Sea Prayer* (p.74)
Table 2: List of major technology companies that manufacture VR headsets (p.108)

List of Figures

Figure 1: Number of films on displacement from the Syrian conflict (2014-2019) (p.70)
Figure 2: Actors involved in the creation of VR films on the displacement of Syrians (2014-2019) (p.72)
Figure 3: The author watching *Project Syria* using Oculus Quest 2 (p.80)
Figure 4: A picture of Oculus Quest 2 (p.81)
Figure 5: A girl singing, *Project Syria* (p.92)
Figure 6: Food distribution tent, *Project Syria* (p.93)
Figure 7: Figures of children multiplying in a camp, *Project Syria* (p.94)
Figure 8: De la Peña's network of virtuous VR actors (the four films analysed) (p.104)
Figure 9: Virtuous VR in the current conjuncture (p.129)
Figure 10: A desert, *Clouds Over Sidra* (p.133)
Figure 11: Children walking to school, *Clouds Over Sidra* (p.134)
Figure 12: Students in the classroom, *Clouds Over Sidra* (p.135)
Figure 13: Children playing by a puddle, *Clouds Over Sidra* (p.135)
Figure 14: Boys playing on computers, *Clouds Over Sidra* (p.136)
Figure 15: Men exercising in the gym, *Clouds Over Sidra* (p.137)
Figure 16: Girls playing football, *Clouds Over Sidra* (p.138)
Figure 17: Sidra crying, *Clouds Over Sidra* (p.138)
Figure 18: Last scene showing Za'atari camp, *Clouds Over Sidra* (p.139)
Figure 19: What I see when I look down as I stand beside Sidra and her family having dinner, *Clouds Over Sidra* (p.140)
Figure 20: Girls playing football (Sidra in the middle), and laundry hanging in the background, *Clouds Over Sidra* (p.148)
Figure 21: Sidra speaking to the camera, *Clouds Over Sidra* (p.150)
Figure 22: Children running towards me and forming a circle around me, *Clouds Over Sidra* (p.153)
Figure 23: I am standing on an abandoned boat, *Refugees* (p.168)
Figure 24: People being helped off a boat, *Refugees* (p.169)
Figure 25: People crying as Wilders speaks, *Refugees* (p.170)
Figure 26: Abandoned life jackets on the shore, *Refugees* (p.171)
Figure 27: People and tents by the sea, *Refugees* (p.172)
Figure 28: People boarding the ferry, *Refugees* (p.172)
Figure 29: A photographer capturing someone who looks exhausted, *Refugees* (p.173)
Figure 30: A man holding an invisible camera stick, *Refugees* (p.174)
Figure 31: The first scene being drawn, *Sea Prayer* (p.198)
Figure 32: Marwan's grandfather's farmhouse, *Sea Prayer* (p.199)
Figure 33: Homs as the father remembers it, *Sea Prayer* (p.200)
Figure 34: Protests and a dark, smoky sky, *Sea Prayer* (p.201)
Figure 35: People on the beach at night, *Sea Prayer* (p.202)

Acknowledgements

There are so many people who have made it possible for me to finish this PhD and have enriched my time in Norwich. Who would have thought someone who could only say basic greetings in English at 13 would complete a 100,000-word thesis!

There are those who have supported me close by and from afar for many years, without whom I could not have gotten this far. Thank you to my parents who have supported me from a young age to pursue my (at times whimsical) interests. To Dan for all the excellent music recommendations. 喜代子おばあちゃん、貞雄おじいちゃん、ずっと応援してくれてありがとう。おじいちゃん、いつも私を見守ってくれていると思います。To 9e, who has kept my life full of laughter and joy for over 16 years and continues to be my rock. To Maro, whose presence in my life brought me joy, inspiration, and encouragement throughout this PhD.

Thank you to everyone who had faith in me when I didn't. To my PGR friends and office colleagues, especially Xing, Sabrina, Arife, Kodili, Connie, Zahra, Yixuan, and Shams, for many lunch breaks and gym sessions filled with laughter, intellectual engagement, and academic guidance. To Barbara, whose friendship and feedback on my writing kept me going. To those who joined the post/decolonial theories reading group, I really valued the space to be able to discuss these readings with you. To the people I got to know through 'decolonising' and anti-racism work: Surya, Jake, Meg, Arzhang, Ruth, Touseef, Francesca, Uli, Pierre, and the brilliant LDC undergrads who organised the Black Lives Matter seminar series, thank you for inspiring me to keep going, and for encouraging me to always think about why and for whom I do this work. To my PSI colleagues (particularly Toby and Lee who organised the work-in-progress sessions), the University of Sanctuary colleagues, the Critical Cultural Studies in Education (particularly Esther, Lauren, and Theresa), and Georgia (MA Gender Studies), where I gained confidence in presenting my work and received invaluable feedback. To Sally, the PGR director and the chair for my viva, for caring about PGR students. Thank you to Dr. Maria Kyriakidou and Dr. Luděk Stavinoha for making me feel at ease during the viva and for your deep and critical engagement with my work.

Dr. Ben Little and Prof. Kirsten McConnachie were amazing human beings as well as supervisors, and I am forever grateful for their support, kindness, incisive advice, and encouragement.

Thank you to the Faculty of Arts and Humanities for the studentship and research and conference grants. To the staff who make UEA what it is, and for their support to students: in particular, many thanks to Dr. Matthew Sillence for the training sessions and for all your help for PGRs; and Beverley for managing our office space and organising social events for PGRs. Thank you to the Student Union, especially the Postgraduate Committee with whom I worked in my second year. Shout out to Ayane and Elise who advocate(d) for postgraduate students every day. Thank you and solidarity to everyone I met on the picket line. Education comes in many forms, not just in the classroom or from 'academic' books. I certainly learnt so much about academia, labour, solidarity, and care from the people I saw and met on the picket.

To Chabujo members, although I haven't been able to contribute as much since moving away from Japan, thank you for grounding me in feminist politics and for the continual reminder that theory and practice are not separate; feminism has saved me on countless occasions, and I am grateful that we met through our commitment to fight against oppression and create a world where we can all flourish.

*

I dedicate this thesis to Sadao ojiichan, who passed away during the course of my PhD. I know he is watching over me every day. And to Misao obaachan, who would have been a brilliant teacher had she been born in another era. I hope to make you both proud.

1. Introduction

1.1 We are not all human, at least not in the same way

The seeds for this thesis were planted when I was 11. Sitting on the floor in the living room at home in Fujisawa city, Japan, I was struck by some footage of a refugee camp on the television screen. No doubt I had seen those scenes before; I do not know what it was about this particular moment that was different. All I remember is that I had as an out-of-body experience, where I saw myself watching this footage. On the screen, there were refugees—represented in ways that have been criticised aplenty, as an anonymous mass (Malkki, 1996), as suffering bodies (Ticktin, 2011)—living in camps. I remember the blue logos of 'UNHCR'. I watched the scenes unfold in front of the screen, being struck by just how different our lives were. It was disorientating. Questions emerged in my mind. Why do I have a safe place to call home? What makes our lives so different? Looking back, this realisation was imbued with saviourism, pity, and othering that I have come to be critical of and to challenge within myself. Nevertheless, it was a moment I realised the luck of birth and the sheer injustice of life chances dictated by borders and nation-states. I sensed, through this encounter, that there is a 'differential distribution of humanity' (Mayblin, 2017).

While I had assumed and was being taught that everyone simply *is* a human being, that we have equal 'rights', and that all lives have value, the more I lived in this world, the more I realised the emptiness of such claims. It seemed that some people are more human than others. Some people are more intelligible as human than others. 'We' are not all human, at least not in the same way. From this critical perspective on the concept of humanity, the figure of refugees epitomises a paradox. Although refugees are often represented as 'humanity'—even as "the purest expression of humanity" (Nyers, 2006, xvi)—particularly in the realm of human rights and humanitarianism (Malkki, 1996; Hyndman, 2000), too often they are not treated as human at all (Arendt, 1973). This realisation led me to think more deeply about what work is being done when something is done "in the name of 'humanity'" (Feldman and Ticktin, 2010, p. 1). Being human, then, is something that cannot be taken for granted. For those who are perceived to be infrahuman[1] (Gilroy, 2014) or non-human, being

[1] Gilroy uses this term to describe those who are deemed human but not quite human.

human is a verb, and something that has to be fought for.

In this thesis, I delve into the politics of humanity through an analysis of virtual reality (VR) films on displacement. It was in the aftermath of the 'European refugee crisis' (2015/2016) that I happened upon an online article about VR films on displacement. It claimed that this technology is going to foster empathy, compassion, and connection between refugees and the target audience by enabling people to virtually experience refugee camps, journeys, and hardships. An interesting claim was being made about the ability of VR technology to mobilise humanity due to its embodied and experiential nature: it seemed to say, 'this piece of technology will make you realise that we are all human, because we are more similar than you think'. This seemed like an attempt to stabilise and depoliticise the concept of humanity as universal. There was nothing to fight for, to confront, to practise, in this invocation of humanity. The 'connection' here involved no work; one simply had to (virtually) experience and feel differently to recognise the common humanity of refugees. As Nakamura (2020) argues, such uses of VR technology presents a technological solution to structural and political problems by claiming to automate empathy and 'human recognition'. Humanity is assumed to simply exist. In this sense, what Danewid (2017) calls 'abstract humanity' based on "ontological understandings of the human condition" (p.1683) such as vulnerability, suffering, and mourning seemed to undergird how VR films are being used to represent refugees and appeal to an audience. This is a universalised, generic humanity that erases the historical, colonial connections that lead people to seek safety and better lives in Europe.

This mobilisation of humanity contrasted with what I found in my previous work, which analysed refugees' attempts to reclaim their humanity through corporeal protests: a naked protest by Tamil asylum seekers at Heathrow Airport in the United Kingdom (UK) in 1987, and hunger strikes and lip-sewing by asylum seekers detained in Australia in 2002 (Suzuki, 2016). Those corporeal protests were not only chosen for practical reasons (that their own bodies were the only tool of protest they could use); the body holds symbolic significance as a potential site to materialise the universality of being human, and how the audience of their protests are implicated in the factors behind border violence. Even as the messages communicated through their protesting bodies were subjected to contesting interpretations that sought to delegitimise

refugees' assertion of humanity, one of my concluding remarks reads: "The body is the vehicle through which our ability to imagine others' experiences, lives, and being can be cultivated, precisely because we are all embodied beings" (Suzuki, 2016, p. 19). Key to my thinking behind the potential of the body to serve as a site of imagination and connection was its universality. Everyone is an embodied being, and that is why the corporeal protests had symbolic significance. This was also why asylum seekers used their bodies to reclaim their humanity. They were using their bodies to expose the contradictions in the supposedly universal concept of humanity: we are *not* all human like you (the audience). They were asking: how are you implicated in the violence to which we are subjected? This seemed to be an explicitly political mobilisation of humanity that spoke to the power dynamics that shape the contours and limits of the human. While asylum seekers used their bodies to expose the fallacy of the universality of the concept of humanity ('we are all human') in the corporeal protests, thus attempting to destabilise and politicise it ('we are not all human, and why is that?'), VR films on displacement appeared to use the body to depoliticise the concept of humanity.

In short, corporeal protests and VR films both seemed to mobilise the concept of humanity as universal but in incongruous ways: the former sought to bring attention to the differential distribution of humanity and its contradictions, while the latter seemed to erase the differential distribution of humanity in service of a 'common humanity' that is assumed to already exist. I started to wonder, how exactly is the concept of humanity being mobilised in relation to refugees in those VR films? What are the implications of invoking the concept of humanity in such a depoliticised way? What purposes does it serve?

1.2 Main thesis and contributions of this study

Since the mid-2010s, a constellation of actors including technology companies, the United Nations (UN), non-governmental organisations (NGOs), and news agencies have produced VR films on displacement. The popularisation of this technology coincided with the 'European refugee crisis', characterised by an increase in the

number of people from the Global South[2], most notably Syria, seeking refuge and a better life in Europe. Nearly one million people had arrived in Europe between January and December 2015 (Spindler, 2015). In this thesis, I argue that 'virtuous VR' (Nakamura, 2020) on displacement attempts to mobilise the idea of a generic humanity in relation to refugees. This mobilisation of a generic humanity characterises what I call a 'humanising' approach to displacement. This is an approach that foregrounds the fundamental commonality as 'fellow humans' between refugees and the audience, in a way that disregards or minimises the differential distribution of humanity. The concept of humanity in this approach is different from that with which refugees have conventionally been associated, such as their representation as an anonymous mass or suffering victims in pain (Malkki, 1996; Johnson, 2011). In the 'humanising' approach that virtuous VR epitomises, refugees are presented as individuals with agency. They have hopes and fears. They are children and parents. They are people 'like us' trying to survive and seek a better life. They are people towards whom 'we' feel empathy and compassion. This humanising approach to displacement attempts to shed light on the faces and stories behind statistics and refugees' representations as a threat or uncontained 'flood'. I apply Nakamura's (2020) concept of 'virtuous VR' and argue that the purported ability of VR to 'humanise' refugees has played a key role in the establishment of a new genre of VR, distinguished not (just) by technological advancements but by the cultural meaning attached to it as 'good' technology. VR technology is well-suited to this approach to displacement because, according to enthusiasts, its technological affordances enable users to get an immediate, experiential sense of a common humanity with refugees.

On the surface, a humanising approach to displacement appears to be better than the aforementioned oft-criticised representations. However, there are two important implications of such an approach to displacement mobilised through virtuous VR. Firstly, virtuous VR functions as a site where dominant 'genres of the human' (Wynter, 2003)—particular understandings of being human that organise society—are

[2] While recognising the limitations of the terms Global South and Global North—for example, their tendency to homogenise vastly different regions and communities—I use them to indicate the unequal global relations of power in terms of economic inequality, (neo)colonial relationships, and epistemic hierarchies.

reproduced. Because such an approach fails to question to which humanity refugees are being included, it sustains the hierarchy of humanity rooted in modernity/coloniality rather than dismantling it. In virtuous VR, refugees are portrayed as having agency and voice and common humanity with the audience. However, this thesis demonstrates that virtuous VR reproduces the dynamics—such as racialisation, gendering, mobilisation of innocence, and invocation of figures of children—that shape *the category of the human* upon which a common humanity is forged, and against which the humanity of refugees is measured. As a result, mobilisation of a generic humanity that foregrounds the commonality between refugees reinforces the hierarchy of humanity, and in turn provides ideological justification for the modern/colonial world order.

Secondly, and relatedly, the framing of VR technology as 'humanising' and 'good' must be understood within the current conjuncture characterised by production of refugee/migrant 'crises' in Europe and North America, increasing securitisation of migration augmented by digital technologies, the crisis of neoliberal capitalism and 'wages of whiteness' (Narayan, 2017; Danewid, 2022), and the convergence of digital humanitarianism and philanthro-capitalism (Burns, 2019a). The mobilisation of a generic humanity through virtuous VR justifies large-scale capital investments into the technology and its introduction into ever-expanding aspects of life for profit. This mode of capital accumulation driven by major technology companies (most of whom are based in the United States [US]) relies on an increasingly precarious labour force (many of whom are based in the Global South) and contribute to environmental destruction through "dirty, toxic and energy-intensive extractive industrial processes" (Taffel, 2021, p. 6) that are the backbone of digital capitalism. In sum, I show that 'virtuous' VR on displacement is doubly deceptive: 'humanisation' reproduces the violence it seeks to challenge through its affirmation of modern/colonial genre of the human, and the issue of displacement is instrumentalised to manage the crisis of neoliberal capitalism and to increase market expansion in pursuit of profit.

My work makes four contributions. First, I contribute to the literature on media representations of refugees. Through the analysis of the relationship between the concept of humanity and refugees in VR films, I demonstrate how virtuous VR on displacement characterises a 'humanising' approach to displacement. I show that VR

films tend to represent refugees as individuals with agency, thus do not reproduce oft-criticised representations of refugees as anonymous victims in pain, but nonetheless attempt to fit them into a particular genre of the human rooted in modernity/coloniality (Wynter, 2003). This is an understanding of the relationship between refugees and the concept of humanity that foregrounds what Chimni (1998) calls the 'myth of difference' propagated since the post-Cold War era: the idea that refugees from the Global South are inherently different from refugees from the Global North (Malkki, 1996; Johnson, 2011; Mayblin, 2017).

Secondly, contrary to work on VR films in displacement from Syria that conducts textual analysis of the films (Kool, 2016; Irom, 2018; Gruenewald and Witteborn, 2020), I use embodied and conjunctural analyses (discussed in detail in Chapter 2) to examine how the relationship between refugees and the concept of humanity manifest in both content of the films and how the technology reorganises social life and human relationships (McLuhan, 2013). Although representations of refugees still matter in virtuous VR, it also attempts to rework the relationship between refugees and the audience and how people come to know displacement through its technological affordances. This study therefore responds to Towns' (2022) call for a materialist media analysis that pays attention not only to the content of media but also how "we come to know the world and our relation to that world" through media (p.3). Because of this, my project has a more expansive scope of enquiry than simply critiquing particular representations of refugees. It is an approach that considers what the concept of humanity *does* through VR technology in the realm of displacement, rather than what it *is* (Suzuki, 2016). This is important because, as I mention in the third point below, it helps to understand the reasons behind the mobilisation of a generic humanity in virtuous VR.

Thirdly, I explore the relationship between refugees and the concept of humanity, and what I call a 'humanising' approach to displacement, through an analysis of virtuous VR as situated in the current conjuncture. By using VR films on displacement as a significant cultural object in the current conjuncture, this thesis studies the political economy of VR films, the actors involved in producing VR films, and the discourses surrounding VR films as much as the content of the films themselves. Virtuous VR's mobilisation of 'humanising' approaches to displacement plays a central role in the

framing of VR technology itself as 'good', which justifies its growing incorporation into various aspects of human life through the cultivation of a new (virtual) site for profit-making and capital accumulation. I point out the dangers of taking this framing for granted, which is the case with many empirical studies that attempt to measure whether virtuous VR increases empathy. Therefore, my study follows critical studies of technology (Noble, 2018; Benjamin, 2019; Burns, 2019a; Couldry and Mejias, 2019; Madianou, 2019; Nakamura, 2020) but specifically focuses on the ways in which the issue of displacement has become instrumentalised to advance corporate interests. Through conjunctural analysis, I show that virtuous VR presents an epistemology of displacement that confines it to the humanitarian sphere, and in doing so, companies involved in the production of virtuous VR can present themselves as 'doing good' even while they contribute to the modern/colonial (neoliberal, capitalist) world order that causes displacement.

Finally, I highlight the importance of scrutinising the power dynamics involved in a 'humanising' approach to displacement. 'Humanising' approach is too often assumed to be inherently better than 'dehumanising' approaches, as I discuss in Section 1.3. However, I show that emphasising a generic humanity shared with refugees does not lead to an emancipatory politics; it ends up sustaining the colonial and racialised hierarchy of humanity. In this vein, my discussion contributes to literature that foregrounds how coloniality and colonial histories shape the dynamics of displacement and differential distribution of humanity (Danewid, 2017; Mayblin, 2017; Rodríguez, 2018; Walia, 2021), and especially decolonial literature that highlights how inclusion into humanity rooted in modernity/coloniality can be just as violent as exclusion from humanity. Attending to such contradictions of a supposedly universal concept like 'humanity' is important in imagining and creating a world free of systems—such as nation-state borders—that dictate who has the right to live and who does not.

1.3 'Humanity' and refugees

Restrictive border controls and the emergence of 'humanising' approach to displacement

As mentioned in Section 1.1, Arendt identified a paradox in the relationship between refugees and the concept of humanity. Although refugees seemed to be in a situation

where they should be guaranteed the “inalienable rights of man” (Arendt, 1973, p. 300) since their nation-states are unable to provide protections, the ways in which they are being treated proved the opposite: “It seems that a man who is nothing but a man has lost the very qualities which make it possible for other people to treat him as a fellow-man” (ibid.). Sadly, this situation does not seem to have changed much, more than 70 years after Arendt wrote those words. Despite calls for refugees to be treated as ‘human beings’, they continue to be subjected to various forms of violence. During the ‘European refugee crisis’ that peaked in the summer of 2015, various actors invoked the concept of humanity. Artist and refugee Ai WeiWei spoke of “one humanity” (2018); former UN Secretary General Ki-moon called on the ‘international community’ to recognise “our common humanity” (2016). Grassroots movements emerged to ‘welcome’ refugees, and called on European states to show compassion and empathy (Bhambra, 2017b, p. 398). Within this broader context, VR films are said to enable more ‘humane’ and ‘nuanced’ representation of refugees (Milk, 2015; Arora, 2019) and “inspire viewers towards increased empathy, action and positive social change” (United Nations Virtual Reality, no date). I identify VR films on displacement, an increasing number of which have been produced since around 2015, as an important site where this relationship between refugees and humanity is being (re)formulated and mobilised.

Mobilisation of a generic humanity through virtuous VR reflects larger shifts in the relationship between refugees and the concept of humanity, which in turn is situated in the broader historical and political context surrounding displacement. According to Johnson (2011), from the 1970s to the 1990s, the popular image of refugees shifted from “a white European individual giving voice to an affirmative heroic political agency” to “a displaced person from the global South, poverty-stricken and fleeing violence and war” without political agency (p.1022). While Europeans fleeing the Soviet bloc were represented as individuals with personal histories, refugees from Africa and Asia were represented as ‘pure humanity’ through their visual representations as corporeal mass and suffering victims (Malkki, 1996). This is a universal humanity that is depoliticised, dehistoricised and stripped of agency, which constructs refugees as ideal recipients of humanitarian assistance (Malkki, 1996, 2010; Hyndman, 2000; Rajaram, 2002).

With the end of the Cold War in the 1990s, the dominant figures of refugee saw a shift; when the strategic significance of refugee movement ended for Europe, refugees began to be represented in the "Western public imagination" as "masses of people" from the Global South (Johnson 2011, p.1027). Chimni (1998; see also Johnson, 2011) describes this shift as the production of the 'myth of difference'. A myth constructing refugees from the Global South as being fundamentally different from refugees from Europe was created, which justified policies of containment (Chimni, 1998). While immigration policies have broadly become more liberal around the world (de Haas *et al.*, 2019), they increasingly place more weight on selecting the 'right' migrants. Restrictive policies are thus targeted at those who are deemed less 'desirable', for example asylum seekers and 'lower-skilled' workers (de Haas *et al.*, 2019, p. 906), based on the myth of difference. Securitisation of specific migration movements and migrants thus followed, shaped by racist and colonial dynamics (Rodríguez, 2018; El-Enany, 2020; Walia, 2021; Danewid, 2022). This was exacerbated in the aftermath of 9/11 terrorist attacks in the US in 2001 and the 'War on Terror', which further entrenched Islamophobia in the name of counterterrorism and security (Kapoor, 2018; Abbas, 2019). 'Muslim refugees' have been conflated with 'terrorists' and are routinely constructed as the constitutive outside of Europe where Europeanness is based on whiteness, Christianity, and modernity (Abbas, 2019, p. 2456). Refugees fleeing the Syrian conflict have also been subjected to media representations that hinge on such conflation in the US as well as Europe, and used as "political bargaining tools" (Ghazal Aswad, 2019, p. 369) particularly during elections. In addition, the development of the Internet and proliferation of digital technologies form the 1990s have led states in the Global North to use increasingly sophisticated technologies such as drones, sensors, cameras, biometrics, and artificial intelligence to surveil and monitor migrants, process asylum claims, and to predict 'risk' (Akkerman, 2018; Leurs and Smets, 2018, p. 2; Ahmed and Tondo, 2021).

Within this broader context, media has played an important part in justifying tougher controls on the movement of refugees to the Global North. For example, Parker (2015) found that British and Australian—two island nations with increasingly strict border policies—print media in the period 2001-2010 depict refugees as criminals and 'unwanted invaders' and dishonest and 'bogus asylum seekers'. Water metaphors acted as a warning about the number of people supposedly trying to enter or already

in the country (Porto, 2022). Similarly, Innes (2010) argues that British media and policy narratives constructed asylum seekers as a threat in three ways: physical threat to the sovereignty and territory of the nation-state, economic threat in rooted in the idea that asylum seekers are trying to enter Britain to access the welfare state, and a threat to social identity ('Britishness'). Asylum seekers are constructed as a homogeneous group with "criminal characteristics" and the desire to "take something way from British citizens" (p.473).

Such media depictions of refugees are said to 'dehumanise' refugees. Esses et al. (2017) conducted experiments and found that there is a causal relationship between media depictions of refugees as 'disease spreaders', 'queue jumpers', and 'terrorists in disguise' in Canadian media and their 'dehumanisation' (defined as "removal from the human race", p.531), particularly when combined with people's uncertainty about the issue of immigration. Bleiker et al. (2013) analysed the "visual dehumanisation"[3] of refugees in Australian newspapers, and found that the dominant visualisation of refugees was one of "anonymous masses" (p.411) such as photographs of boats and groups of people whose facial expressions are unclear. Since identifiable victims are more likely to generate compassion[4], such visualisations create "a culture of fear" (p.411) and limit the possibilities for political discussions. Adding nuance to this conclusion by Bleiker et al. (2013), in a study investigating the effects of participants' exposure to large groups of anonymous people, Azevedo et al. (2021, p. 14) found

[3] While Bleiker et al. (2013) do not explicitly define what 'dehumanisation' is, they write that it entails the construction of displacement as a potential threat rather than a humanitarian issue that requires a compassionate response. In contrast, humanisation is defined as personalisation: portraying refugees as individuals and human beings.

[4] This is called the 'identifiable victim effect' (IVE). IVE posits that people tend to take action (e.g. donation) for identifiable victims than for anonymous victims (Lee and Feeley, 2016, p. 199). Although studies on IVE has produced different results, Lee and Freeley's (2016) meta-analysis of scholarship on IVE found that there is a significant overall mean effect size, although not as so large as to reflect the amount of academic interest in IVE. They also found that IVE depends on the attributes of the victim represented. One argument they make is: "…IVE appears reliable mainly when there is a single identified or a single unidentified victim, and/or when study characteristics include elements of the following: a photographed child suffering from poverty, bearing little responsibility for the need, and/or associated with monetary requests" (Lee and Feeley, 2016, p. 211).

that exposure to large groups does not automatically lead to lack of “identification of human subjects” (i.e. dehumanisation). They suggest that “processes of categorical perception and stereotyping are subject to historical and social contexts” (Azevedo *et al.*, 2021, p. 14).

Amidst such scholarly debates, Chouliaraki and Stolic (2017) argue that it is not specific categories of visual representation that dehumanise refugees (e.g. ‘threat’ or ‘sufferer’) but the “substitutability” of such visual categories that nevertheless operate within “shifting claims to humanity” (p.1165). In other words, the fundamental issue is not the categories used to ‘dehumanise’ refugees but the fact that their humanity is always in doubt. This suggests that it is important to examine what this “shifting claims to humanity” entails: what are the parameters of ‘humanity’ in relation to refugees, and what are the dynamics that shape them? However, there is comparatively less literature that discuss those questions from a critical perspective in the literature on ‘humanisation’. For example, Bleiker et al. (2013, p.408) write that “images of a lone sufferer humanise a political crisis” and point out that the absence of such “humanising” (Bleiker *et al.*, 2013, p. 406) representations of refugees in the Australian context contribute to their dehumanisation. Similarly, Esses at al. (2017) argues that uncertainty coupled with ‘dehumanising’ media representations led to “the removal of the constraints imposed by humanity [belonging to the human race] and kindness considerations” (Esses, Medianu and Lawson, 2017, p. 531). In the former, ‘humanising’ representations of refuges is implied to be the opposite of ‘dehumanising’ representations but is not expanded on. In the latter, ‘humanity’ is taken for granted, and the hierarchies that exist within the concept of humanity are not attended to.

There are some studies that attend to the parameters of ‘humanity’ in relation to refugees and the dynamics that shape them, thus investigate the concept and practice of ‘humanisation’ in relation to refugees. For instance, Kirkwood (2017) conducted a discourse analysis of parliamentary debates in the UK in response to the ‘European refugee crisis’ to identify processes of humanisation, which he defines as “the process (and effect) of portraying others in ways that encourage empathy and legitimise support”, and “ways of discursively constructing people as belonging to a common moral community, of acting in ways that are understandable, as deserving of support” (p.117). In their analysis of dehumanising and humanising discourses in the Spanish

press during the ‘European refugee crisis’, Montagut and Moragas-Fernández (2020) found two ways in which refugees were ‘humanised’ as people with agency: the use of journey metaphors which attempts to generate empathy, and the construction of refugees as political actors who generate conflict and crime. Their conclusion that humanisation does not necessarily produce empathy or compassion towards others as human beings is in line with the philosophical arguments of Manne (2016, 2018), who writes that being seen as a human being also entails the possibility of being seen as an enemy, as a threat, and so forth. From a political theory perspective, Danewid (2017) pointed out that there is a tendency to emphasise a generic humanity shared with refugees in pro-refugee activism, centred on notions of vulnerability, grief, and mourning that are positioned as universal conditions of being human. She argues that such conceptualisations of humanity disconnect the modern/colonial project of Europe from the displacement of people like those fleeing the Syrian conflict, positioning Europe as a saviour and an innocent bystander. Rather than a generic humanity, she advocates for a historical humanity that is rooted in “a shared, global present built on colonialism, racism, and white supremacy”, of which refugees are a victim (Danewid, 2017, p. 1683). Similarly, Darling (2021) brings attention to the ‘cautious politics’ of the process of ‘humanising’ refugees, such as the importance of questioning the different ways in which the category of the human has been conceptualised and mobilised. My work brings together and adds to such critical perspectives on the concept of ‘humanity’ and what happens when this is mobilised in VR films on displacements.

Drawing on such literature, this thesis identifies one way of understanding ‘humanisation’ as an approach to displacement that foregrounds the commonality as fellow human beings (i.e. ‘humanity’) between refugees and the audience, while disregarding or minimising the differential distribution of humanity. To be clear, this is not the only way to understand ‘humanisation’. As Brankamp and Weima (2021, p. 2) write, ‘humanisation’ as a concept and practice “encompasses complex processes of (re)building, (re)constructing, and (re)thinking “the human”, humanity, and social relations”. As they rightly highlight, and as I explored in Suzuki (2016), refugees *are* human. They know this. It is only through an encounter with the world that casts doubt on people’s humanity (Fanon, 2008), and one that treats them as sub- or non-human in various ways, that the need for ‘humanisation’ emerges. Nevertheless, I adopt this conceptualisation of ‘humanisation’ because I believe it is the most useful way to

understand why virtuous VR, driven by a constellation of actors, is being framed as a 'humanising' and therefore 'good' technology.

Understanding 'humanisation' from a critical perspective is important because, generally speaking, there seems to be an assumption that since dehumanisation of refugees is bad, its opposite, humanisation, is good (or at least better) (Darling, 2021). It is because of this thinking that there have been efforts in recent years to counter such dehumanising narratives and representations with stories of "super-refugees" (Fiddian-Qasmiyeh, 2017) or of 'good immigrants' who have made great contributions to society. Recent high-profile examples include Mamoudou Gassama and Sarah and Yusra Mardini. In 2018, Gassama, a 22-year-old from Mali who had just arrived in France via Libya and Italy, saved a child who was about to fall off a balcony. After a video of him rescuing the child went viral online, he was praised for his courage and received French citizenship after his immigration papers were fast-tracked (Chrisafis, 2018). Another story that has received much media attention is that of Sarah and Yusra Mardini, sisters from Syria who rescued fellow refugees when their boat heading towards Europe broke down in 2015 (Saul, 2016). Yusra went to on to compete in the 2016 Olympics as part of the 'Refugee Olympic Team'.

The elevation of such 'humanising' representations of refugees reflects the wider shifts in humanitarian communication. Since around the mid-1980s, 'positive' humanitarian communication emerged to challenge 'negative' humanitarian communication of the previous decades (Scott, 2014). While negative humanitarian communication emphasised the suffering of innocent and helpless 'victims' in the Global South that evoke pity and guilt in the audience in the Global North, positive humanitarian communication focuses on the beneficial effects of donors on the recipients, and people are depicted as individuals with agency and voice. In the minds of humanitarian actors, this 'personalisation' 'humanises' refugees as being more "like 'us'" and highlighting "the sense of shared humanity between themselves [the audience] and the subject" (Scott, 2014, p.149). In popular media, people have also tried to counter the dehumanisation of refugees through calls to recognise refugees' 'humanity' (e.g. Weiwei, 2018; Jones, 2015). Moreover, refugees themselves have made claims in the name of humanity against state and border violence, to assert their humanity and demand treatment as human beings (Suzuki, 2016): "We are human…we are not

animals" (a person detained in Woomera, Australia, which has closed down since then, quoted in Whyte, 2003, p.430), "I want them [the police in Greek or Turkey] to treat us like we are humans" (people fleeing to Greece, quoted in josoor, 2020). Audiences also seem to be more receptive to such 'humanising' depictions of refugees. For example, in her research on audiences' attitudes towards refugees, Kyriakidou (2021) found that participants focused on the cultural similarity of Syrian refugees (e.g. in their middle-class status) to Greek 'hosts', as well as on "the idea of a shared humanity" with Syrian refugees based on a common historical experience of displacement as Greek people had fled the Turkish-Greek conflict (1919-2022).

In these ways, the figures of refugee have varied and at times conflicting relationships to the idea of 'humanity'. Refugees are presented as universal humanity in the sense of being devoid of agency, individuality, and history; as those expelled from the category of the human (Arendt, 1973); racialised as 'infrahuman' (Gilroy, 2009) or not-quite-human; as people whose humanity is something that needs to be asked for and to be recognised by others, at the same time as they take action on the basis that they *are* human (Suzuki, 2016). In most cases, however, the idea of humanity that lies at the heart of both 'dehumanisation' and 'humanisation' are not considered in depth. Within this wider context, I identify virtuous VR, which is symbolic of the current conjuncture as I explore below, as one significant site where the concept of humanity is mobilised to 'humanise' refugees. Before providing an overview of virtuous VR, I clarify how I understand the concept of 'humanity'.

'Humanity': Universalised, collective subject

'Humanity' is an unstable, malleable, and contested concept. It is invoked by different actors for various purposes (Feldman and Ticktin, 2010, p. 25), and is enacted through practice, most notably in humanitarianism in relation to refugees (Fassin, 2010). Humanity is primarily referenced in the literature on human rights and humanitarianism[5] (Malkki, 1996; Esmeir, 2006; Ticktin, 2006; Agier, 2010; Barnett,

[5] In this thesis, I refer to humanitarianism as it developed in Europe and North America, which has been "imprinted by modernity, the Enlightenment, and the belief that it is possible to engineer progress" (Barnett, 2011, p. 21). While there are different histories and localities of humanitarianism, I draw on

2020; Graf, 2021). It is most notably present in humanitarian principles. For instance, the International Red Cross and Red Crescent Movement's fundamental principles consist of humanity, impartiality, neutrality, independence, voluntary service, unity, and universality. Jean Pictet, who initially proposed those principles, wrote that the principle of humanity underpins all the other principles. Defining 'human' as "a man who is good to his fellow beings", he describes humanity as "a sentiment of active goodwill towards mankind" and "human nature and even human species as a whole" (Pictet, 1979). In humanitarian operations, the principle of humanity means assisting people without discrimination, alleviating suffering wherever it is found, protecting life, respecting every human being, and promoting peace among people ('The Fundamental Principles of the International Red Cross and Red Crescent Movement', 2015, p. 3). The idea that "we are all part of the same human race, and as a result, we are all deserving of respect, dignity and rights" is also reflected in the UN's Universal Declaration of Human Rights (Fast, 2016, p. 113). This is the supposedly inalienable right of all humans, based on "the inherent dignity and of the equal and inalienable rights of all members of the human family" (UN, 1948). In this way, humanity is a universalising concept in that it emphasises the commonality between all human beings ("the human family"). I use the term 'universalising' to foreground the fact that there are active processes through which the concept of humanity comes to be assumed as universal (Malkki, 1994). Throughout the thesis, I use the terms 'universalising' and 'universal' interchangeably, as I believe what comes to be thought of or presented as 'universal' always involve various processes that actively construct it as such; it never simply is.

The concept of humanity is most notable in the domains of human rights and humanitarianism, which both concern people's lives. They also concern what Barnett (2020) calls the "transcendent" character of humanity (p.7). This transcendent character, not necessarily in the religious sense, refers to its endurance and aspirations for a world that treats everyone as human (Barnett, 2020, p. 7; Graf, 2021, p. 18). While humanitarianism and human rights are both universalist discourses, Ticktin (2006) points out the two are conventionally distinguished in terms of the

this humanitarianism due to my focus on techno-utopian framing of VR technology in the Euro-American context.

different ideas about ‘humanity’ upon which they are based: human rights are rooted in the shift from a religious towards a secular understanding of ‘humanity’ during the Enlightenment and is more about justice and entitlement, whereas humanitarianism is rooted in religious notions of charity, and concerns generosity. While there are differences between human rights and humanitarianism, in this thesis I refer to both bodies of literature without making distinctions between them with regard to the concept of ‘humanity’. This is because refugees are supposed to benefit from the protection of international human rights, and yet many of them are recipients of humanitarian aid. As Ticktin (2006) points out, it is difficult to distinguish between the spheres of human rights and humanitarianism as they overlap.

Although humanity purports to be apolitical particularly in the area of humanitarianism, the effects of its invocation are profoundly political. For example, Ticktin (2011) points out that there is a rise in the humanitarian conception of ‘humanity’ centred on biological life, suffering, and compassion that privileges “benevolence over justice, standards of charity over those of obligation” that ends up limiting the notion of humanity (Ticktin, 2006, p.42). This ‘politics of care’ based on benevolence and compassion, couched in humanitarianism that purports to be apolitical, works to reinforce “unequal access to the means of existence” since the key to gaining access becomes the suffering body that is able to elicit compassion and empathy (Ticktin, 2011, p.223). Such effects of humanity in humanitarianism can be understood as an integral part of how the concept is invoked. Agier (2010, p. 31) discusses how humanity works in the refugee camp context, and asserts that humanity is a totalising “double-sided identity”. There is no ‘other’ as such in this conceptualisation of humanity, in the sense of someone who is outside of humanity; rather, there is “the absolute victim” who is an “absolute and essentialized humanity when it is suffering” (Agier, 2010, p. 31) and has no individual voice. Humanity in this context eliminates difference and contention. It is “a world in which one sole common identity [humanity], immediately upon injury, creates victimhood “regardless of sex, religion, ethnicity, political opinion” (Agier, 2010, p. 31). This victimisation robs them of their “human qualities” to different degrees. Even as humanitarianism purports to be universal in that sense, it still operates according to various systems of classification within humanity, such as the idea of ‘vulnerability’ that is often used to categorise which refugees are most in need (Agier, 2010, p. 32; Turner, 2019b). Attempts to eliminate

difference and contention thus end up reinforcing unequal life chances, as Ticktin (2006) points out. As it will become clearer throughout this thesis, I begin from the position that the very instability of the concept of humanity leads to contestations and attempts at stabilisation. Far from being apolitical, the mobilisation of humanity is a highly political process.

In this thesis, I draw on two main meanings of humanity: as a universalised, collective subject and as qualities of being human that accompanies a certain affective disposition (such as acting with kindness or empathy towards 'fellow' human beings) (see also Asad, 2015; Çubukçu, 2017; Graf, 2021). Those two meanings are not completely separate and often feed into each other. I also understand it as a universalising concept, in other words, a collective subject to which *every human being* is assumed to belong. For instance, humanity as a collective subject is often invoked to suggest that 'we' are all part of the 'human family' or 'human community'; and that consequently everyone who is part of it is equal and needs to be treated with dignity and respect (Barnett, 2020, p. 10). Importantly, this idea of humanity as a collective subject is never fixed and stabilised. Various discourses, practices, and actors are constantly at work to constitute humanity as a 'human community' (Malkki, 1994, 2010, p. 60). My aim here is not to seek to define what humanity is but to attend to how humanity works and what humanity *does* through virtuous VR on displacement.

Decolonial theory and 'humanity'

In the previous sections, I defined humanity as a collective subject that is universalised, and described a 'humanising' approach to displacement as an approach that centres the assumed fundamental commonality as human beings. I am particularly interested in the framing of virtuous VR as novel, innovative technology to foster human connection, empathy; and above all how a universal, generic humanity may (re)produce violence and silencing that it supposedly seeks to tackle. This line of enquiry is especially relevant to understanding the vexed relationship between refugees and the concept of humanity that I outlined above. My aim is not to completely dismiss the concept of universal humanity, or concomitant 'humanising' emotions such as empathy that virtuous VR is said to generate. Rather, this thesis aligns with what Berlant (2004) describes as "a project of critique [that] seeks not to destroy its object

but to explain the dynamics of its optimism and exclusions" (p.5). To scrutinise the dynamics of humanity's optimism and exclusions means not taking what is done in its name for granted. It means paying attention to the ways in which the concept of humanity continues to organise social and political life, especially in relation to displacement for purposes of this thesis.

To do this work, I approach the concept of humanity from decolonial theory. In general, 'decolonial theory' refers to scholars from Latin America who have developed the 'modernity/coloniality' framework which I describe below. However, I also use it more broadly to refer to literature that centres coloniality as a central force in the current world (Maldonado-Torres, 2011, p. 2). 1492, when Christopher Columbus 'discovered' the Americas, is crucial to decolonial theory; by centring this colonial encounter in their analysis, decolonial scholars have developed a rich body of work that theorises the concurrent development of 'modernity' and capitalism that cannot be separated from colonialism. Decolonial theory seeks not just to deconstruct and dismantle colonial epistemologies and relations but also to reconstruct different worlds at both individual and collective levels (Tamale, 2020, pp. 20–21)[6]. Coloniality refers to the ways in which present global power relations of exploitation and domination rooted in European colonialism[7] continue to shape the contemporary world, despite the formal end to colonialism through the creation of independent nation-states (Tamale, 2020, xiii). Decolonial theory consequently highlights the unfinished project of dismantling coloniality that persists to this day.

[6] There are differences between postcolonial theory and decolonial theories. Although both theories centre experiences of colonialism, they can be distinguished in two main ways (Bhambra, 2014; Ndlovu-Gatsheni, 2015). Firstly, their periodisation is different. Since postcolonialism emerged from the work of scholars from the Middle East and South Asia, they typically start with British colonisation in the 19th century. In contrast, decolonial theory starts from Spanish and Portuguese colonialism in the 15th century. Secondly, postcolonial theorists have tended to work in the humanities, such as English literature. As such, they have been accused of privileging the cultural at the expense of the material. In contrast, decolonial theorists take seriously the relationship between socioeconomic systems and epistemic power (coloniality of power).

[7] This is not to suggest that colonialism is only a European phenomenon (I discuss Japanese colonialism in relation to my positionality in Chapter 2). However, I follow decolonial theorists' focus on European colonialism as it is most relevant to the emergence of virtuous VR from the Euro-American context.

Decolonial theory is particularly useful in understanding how dominant conceptions of humanity have always been entangled in what Quijano (2000, 2007) terms 'modernity/coloniality'. This concept refers to the idea that modernity and coloniality are two sides of the same coin; they are constitutive of each other (Mignolo, 2018b) as the idea of Europe as being 'modern' is intrinsically tied to its colonial endeavours that began in the 15th century (Césaire, 2000; Quijano, 2000). In this paradigm, then, it is not a contradiction that the idea of humanity as formulated in liberal thought and European enlightenment designated the category of the human to European man while characterising others as less than human (Lowe, 2015), or that whiteness requires blackness as a prop in liberal humanism (Jackson, 2020).

Modernity/coloniality forms the foundation for three overlapping key concepts in decolonial theory: coloniality of power, coloniality of knowledge, and coloniality of being (Ndlovu-Gatsheni, 2015, pp. 489–490). First, coloniality of power describes the "multiple and heterogenous global hierarchies…of sexual, political, epistemic, economic, spiritual, linguistic and racial forms of domination and exploitation" (Grosfoguel, 2007, p. 217). It refers to the various interlocking processes that create the modern/colonial world. For example, as capitalism developed through colonial expansion, the invention of the idea of race and a sex/gender system imposed on colonised worlds produced new gendered and racialised divisions of labour (Lugones, 2008). According to Lugones (2008), there are two sides to this 'colonial/modern gender system': light and dark. The light side is characterised by 'biological dimorphism' (i.e. assumed sexual binary) and heterosexuality, and this is where white bourgeoise men and women were situated. The dark side is where Indigenous and enslaved men and women were situated. Indigenous and enslaved women were racialised and gendered in ways that excluded them from the category of 'woman'. They were associated with sexual aggression and deviance, and understood to be able to withstand hard labour, which justified sexual violence, and enslaved and indentured labour. Consequently, in the modern/colonial world, there is a gendered and racialised hierarchy to the concept of humanity. Race, therefore, is best understood "as a technology for the management of human difference, the main goal of which is the production, reproduction, and maintenance of white supremacy on both a local and a planetary scale" (Lentin, 2020, p. 11). Whiteness, which constitutes white

supremacy, is not about skin colour but is “a ‘standpoint’ rooted in structural power” (Sabaratnam, 2020, p. 5). In the modern/colonial world, race is one of the main ways in which hierarchies are created among people—to “discipline humanity into full humans, not-quite-humans, and nonhumans” (Weheliye, 2014, p. 3)—to produce racialised division of labour and relations of domination such as patriarchy (Quijano, 2000; Grosfoguel, 2007; Lugones, 2008).

The second aspect, coloniality of knowledge, refers to the politics of knowledge production: what counts as knowledge, who produces knowledge (about what and whom), and for what purpose. During colonialism, colonised people’s forms of knowledge, modes of expression, and ways of being were repressed and destroyed, which was often accompanied by the imposition of colonising cultures (Quijano, 2000; Tamale, 2020). The idea of Europe as being ‘civilised’, ‘modern’, and ‘developed’, and other parts of the world as lagging behind or as being on a ‘wrong’ path was used not only to justify colonialism and to entrench European superiority but also to mask how Europe’s ‘civilisation’, ‘modernity’, and ‘development’ precisely depended on colonial exploitation and violence (Rodney, 2018). This dynamic is central to the myth of difference (Chimni, 1998) that still dominate how refugees are represented and treated. This myth posits refugees from Europe and refugees from the Global South as being fundamentally different; frames refugees from the Global South as ‘economic migrants’ vis-a-vis ‘political refugees’ in Europe; and attributes displacement in the Global South to internal factors with no regard for capitalist expansion and imperialism (ibid.). This myth is sustained in a generic, universalised conception of humanity that obfuscates the modern/colonial character of the contemporary world. This is why European states are able to position themselves as ‘innocent’ and ‘generous’ bystanders to refugee ‘crises’ (Danewid, 2017).

Lastly, coloniality of being refers to the production of modern subjectivities, including who counts as ‘human’. Within the modern/colonial system, Euro-American people laid claim to ‘being’, while others were relegated to the perpetual state of ‘becoming’ human (Ndlovu-Gatsheni, 2016, p. 45). In this sense, the concept of humanity does not simply follow the logic of exclusion (often understood as dehumanisation, or being excluded from the category of humanity) and inclusion (often understood as humanisation, or being included into the category of humanity). From a decolonial

perspective, humanisation is not necessarily better than dehumanisation, as mentioned earlier. There is already a hierarchy of humanity because people have always been included in humanity as "*potential* humans" (italics original; Çubukçu, 2017, p. 262) within an evolutionary, linear, and progressive understanding of what it means to be human (Walcott, 2021). In this sense, the issue, again, is not whether to be included or excluded from humanity, but to reveal—and to reimagine—who is defining who the human is, and for what purpose (Mignolo, 2018a, p. 153). This thesis posits virtuous VR as an important site where this work of particular actors defining the category of the human is being done.

It matters who narrates who 'we' are. As Wynter argues, a "descriptive statement of the human" is foundational to 'modernity', and one aspect of dismantling the modern/colonial world and remaking a new world requires "redescription of the human" (Wynter, 2003, p. 268). Decolonial thinkers thus contextualise the concept of humanity within coloniality in order to deconstruct its supposed universality, while simultaneously seeking other ways of understanding and practising what it means to be human. The category of the human that undergirds the concept of humanity is at times Eurocentrism couched in the language of universality. Graf (2021) succinctly terms this "inclusionary Eurocentrism" (p.5), whereby a particular Eurocentric endeavour is constructed as universal, and others are assimilated into this paradigm. Wynter (2003) puts this problematic in another way: the struggle of our contemporary world is one between two 'genres' of the human, Man, the "present ethnoclass (Western bourgeois) conception of the human…which overrepresents itself as if it were the human itself", and Human, "the human species itself/ourselves" (p.260). She proposes that contemporary struggles "with respect to race, class, gender, sexual orientation, ethnicity, struggles over the environment, global warming, severe climate change, the sharply unequal distribution of the earth resources" (Wynter, 2003, pp.260-261) represent different dimensions of this larger struggle between Man and Human. Wynter mentions that "refugee/economic migrants" who are "stranded outside the gates of the rich countries" are central to this struggle (p.261), although she does not elaborate how. One way to understand this point is to situate the functions of nation-state borders, immigration control, and migration within the framework of modernity/coloniality. Borders operate as a productive force that produces racialised and gendered division of labour globally (Mezzadra and Neilson, 2013), reinforcing the

hierarchy of humanity that positions Man at the top. This is why rich people can move with ease through schemes like investor visas, or why it is even possible to talk about the 'most powerful passport', which ranks how many places a particular passport can access without applying for a visa (Henley & Partners, no date), while others are deported, detained, or left to drown in the sea.

Decolonial perspectives on 'humanity' provide a framework to understand the apparent paradox Arendt (1973) identified: refugees, left in the "abstract nakedness of being nothing but human" (p.297), are routinely detained, deported, and subjected to discrimination and violence, and even killed[8]. According to Arendt (ibid.), refugees expose the paradox that *human* rights in fact only exist for citizens who can enjoy the benefits of being protected by their nation-state[9]. Decolonial theory reveals that this is not, in fact, a paradox if one understands the entanglement between humanity and modernity/coloniality. As Mayblin (2017) argues, while the treatment of refugees and asylum seekers is usually understood through frameworks of race or racialisation (although they are also tied to modernity/coloniality), they do not fully explain what makes it possible for certain human beings to be marked as different in the first place. Instead, it is the wider system characterised by modernity/coloniality from which race derives that elucidates why people called 'refugees' continue to be met with violence and indifference.

Decolonial theory is also useful in thinking about how to reconstruct the concept of humanity, since it does not simply offer a critique of modernity/coloniality but illuminates the ways in which those whose humanity is questioned have carved out spaces for different ways of being. While humanity is a concept indicative of a form of violent classification and dispossession, it is also a concept that refugees make claims to and use to create a world where everyone is treated as a human being; in this sense,

[8] Gilroy (2009) has pointed out that Arendt misrecognised the "abstractly naked human as natural or essential human" by failing to consider how race shapes the human. For Gilroy, refugees are not abstractly naked humans but are relegated to infrahuman status through racialisation (Gilroy, 2009, p. 19).

[9] Nevertheless, as Ong (2006) points out, citizenship cannot easily be juxtaposed to a condition of statelessness as Arendt suggests. Not all citizens enjoy their rights as citizens, and it is possible for those who are not citizens to have access to rights and benefits associated with citizenship.

humanity is also a conceptual and practical tool with which refugees exercise agency (Mezzadra, 2020). It would therefore be unfair to dismiss the concept of humanity altogether as merely reproducing modernity/coloniality. For example, in January 2020, around 300 women also protested the European Union (EU)'s lack of action and the dire conditions of the Mória Refugee camp in Greece, asking, "Aren't we human too?" (Are You Syrious?, 2020). Thinkers like Gilroy (2009) highlight the urgent and still-relevant task of creating "new varieties of humanism" that challenge racial hierarchy (2019). Against 'humanity' rooted in liberalism that "spoke grandly about all humanity but made whiteness into the prerequisite for recognition" (Gilroy 2009, p.15), as well as those who repudiate any form of universal humanity, he urges people to continue grappling with the concept of universal humanism while taking seriously modernity, race, and colonialism (Nyong'o, 2014). On the other hand, taking the perspective of fugitive feminism that embraces the exclusion of Black women from the category of the human and 'womanhood' from liberal humanism, Emejulu (2022) seeks what can be found in "the end of humanity itself" (p.69) rooted in the human/other binary. Similarly, Çubukçu (2017) thinks "against" humanity to consider whether a unified humanity is desirable: "we could constitute…measures of justice that we want to live by, humans and non-humans alike, and build the political and ethical communities that we wish to nurture and defend" (Çubukçu, 2017, p. 266). I will return to those points in the conclusion. It is sufficient to reiterate here that there are many ways of conceptualising and practising humanity and the one I present in this thesis is just one perspective. Having laid out the decolonial approach to the concept of humanity, the next section turns to the emergence of virtuous VR.

1.4 'Virtuous VR' on displacement in the current conjuncture

The emergence of 'virtuous VR' on displacement in the mid-2010s

McLuhan (2013) famously proposed that media is an "extension of ourselves" (p.14), in other words, new media introduces new relations and ways of knowing the world. Media thus do not simply represent the world, but actively shape how people come to know and engage with it (Towns, 2022, pp. 2–3). However, if McLuhan posited that media is the extension of "ourselves", who is *us* (Towns, 2022)? Following Towns' work (2020, 2022) which calls for scholars to study the ways in which media shape and change human relations and engagements with the world, this thesis presents

virtuous VR as media that produces a particular way of knowing and engaging with displacement, refugees, and the concept of humanity through its technological affordances.

VR can be defined as a computer-generated virtual environment with which the user can interact. Key features of VR are immersion and presence. Immersion can be defined as being “more fully with the body of another” or in the virtual environment (Jarvis, 2019, p. 3). It comprises various properties of the VR experience such as visuals, sound, compelling narrative, haptics, and the user’s orientation towards the VR experience that create a sense of deep engagement with the virtual world. Presence is the user’s subjective sense of ‘being there’ in the virtual environment (Bailenson, 2018; Evans, 2018). Importantly, both immersion and presence are socio-technical assemblages that requires a number of factors, involving both the user and the VR technology itself, to work well (Evans, 2018).

First developed in the 1980s and 1990s, VR technology experienced a second wave from the mid-2010s. Following the increase in commercial interest and investment into the technology spearheaded by Meta’s (previously Facebook) investment in Oculus VR in 2014 (Evans, 2018), humanitarian organisations, international organisations like the UN, technology companies, and journalists started to produce more and more VR films on various social and political issues, including displacement. Following the purchase of Oculus VR for around $2 billion, Facebook changed its name to Meta in 2021. Meta CEO Mark Zuckerberg simultaneously announced that the company will heavily invest in the ‘metaverse’, a virtual space comprised of not just VR but also Augmented Reality (AR), personal computer mobile devices, and gaming consoles that enable people to socialise, do business, and even work. In his own words, the metaverse is “an embodied internet, where instead of just viewing content—you are in it. And you feel present with other people as if you were in other places, having different experiences that you couldn’t necessarily do on a 2D app or a webpage…” (Zuckerberg, 2021).

Between the beginning of 2019 and the end of September 2022, Meta spent $36 billion on Reality Labs, which is responsible for its VR and metaverse businesses (Dean, 2022). It has launched Horizon Worlds, a VR environment for socialising and gaming,

although Meta has not been able to attract many users[10]. As I explore in Chapter 3, other major technology companies like Microsoft have also been investing heavily in VR technology. However, as of January 2023, the metaverse has not taken off as those companies had hoped. Despite the huge amounts of investment into the metaverse, Meta reported a decline in revenues in October 2022, and its share prices similarly dropped (Murphy, Johnston and Criddle, 2022; Sherman, 2022). In November 2022, Meta announced job cuts of 11,000 employees (Murphy, Johnston and Criddle, 2022). Given this context, there seems to be a concerted effort to push for the adoption of the metaverse and VR technology. Most notably, the World Economic Forum[11] (WEF) launched the initiative 'Defining and Building the Metaverse' at the Annual meeting in Davos 2022. In January 2023, it was reported that WEF is seeking to create a "Global Collaboration Village", a virtual space for WEF members to meet and for WEF partners to showcase their projects (Chow, 2023). Although the Time article contrasts corporations using the metaverse for profit with those like WEF who are interested in using it "for public good" (ibid.), this thesis demonstrates that they are in fact two sides of the same coin. VR films about refugees are being used to advance market expansion, investment, and profit-making under neoliberal capitalism.

Amongst such growing commercial interest and investment into VR technology, and the increasing availability of affordable and accessible VR headsets that were previously technologically impossible to realise, an increasing number of VR experiences about social and political issues have been released. Since the mid-2010s, international and humanitarian organisations and VR companies have produced VR films to shed light on pressing issues to raise funds and awareness in the Global North. For example, 'VR Nonfiction: A Mediography' database identifies 603 VR nonfiction titles released between 2012 and 2018, with a marked increase

[10] Meta had set out to reach 500,000 active users by the end of 2022, but internal document showed that the actual figure was below 200,000 as of October 2022 (Bobrowsky, Rodriguez and Bobrowsky, 2022).

[11] Calling itself "the International Organization for Public-Private Cooperation", WEF is a not-for-profit foundation established to "shape global, regional, and industry agendas" by bringing together key corporate, political, and cultural players such as state leaders, businesspeople, and 'cultural leaders' (World Economic Forum, no date c). Its revenue is generated by multinational corporations and through membership fees.

from 2015 onwards (Virtual Realities: Immersive Documentary Encounters, n.d.). Among this growing corpus, a particular kind of VR experience has emerged: 'virtuous VR' (Nakamura, 2020). According to Nakamura (2020), this refers to VR experiences created after Meta's acquisition of Oculus that market the technology as "a compassionate, connecting, and above all empathetic kind of machine" (p.48). Techno-utopian remarks about the transformative potential of VR technology builds on the discourses during the 1980s and 1990s, when high expectations abound regarding VR technology's potential to explore otherworldly virtual environments, and to foster human connections while bridging or even eliminating difference within the virtual world (Lanier, 1989; Chesher, 1994). Enthusiasts imagined boundless connections with anyone around the globe, drawing on the idea that VR technology enables "bodily and subjective transcendence" (Green, 1999, p. 416). However, Nakamura (2020) argues that what makes virtuous VR different from those earlier claims, more than the technological advancements in recent years, is that there is now a specific meaning attached to VR technology: that it is technology 'for good'. In this thesis, I use her concept of virtuous VR to understand the relationship between the concept of humanity and refugees.

Virtuous VR covers a variety of issues such as solidarity confinement, disability, homelessness, poverty, displacement, incarceration, racism, police violence, diseases, climate destruction, education, food security, bullying, war, indigenous struggles, and geographical areas (Nakamura, 2020; Al Jazeera Contrast, no date; Meta, no date; The Guardian VR, no date; United Nations Virtual Reality, no date b). What all the pieces have in common is the claim to "preserve and transmit the experiences of disadvantaged and suffering people through immersive stereoscopic video" (Nakamura, 2020, p.49). Virtuous VR therefore relies on the production of abject subjects—what Tyler (2013, p.9) calls 'figurative scapegoats', replaceable figures through whom anxieties and hostilities are mobilised—for its claim to 'do good'. As Nakamura summarises: "It is precisely because Black teenagers are shot, because transgender people are attacked and left with physical disabilities, and because homeless people suffer violence, fear, and pain that VR creators want to depict their experiences" (p.56). Within virtuous VR, Nakamura highlights "the refugee VR documentary" as "one paradigmatic genre" where the technology is said to bridge difference by putting the user into the shoes of refugees (Nakamura, 2020, p. 48).

Virtuous VR on displacement is the focus of this thesis due to the significance of refugees as abject figures. Refugees are 'constitutive outsiders' (Dillon, 1998, p. 31) of the nation-state system that emerged in the 20th century. Although displacement is not a new phenomenon, refugees in the modern/colonial world are an intrinsic part of the nation-state system by virtue of their exclusion. They are needed as outsiders to give meaning to those imagined as insiders (citizens) of the nation-state (Haddad, 2008). This is why various categorisations used to describe people who move and cross various borders—including 'migrants' and 'refugees'—should be understood as "state-regulated relations of governance and difference" (Walia, 2021, p. 2) that are used to manage and maintain the neoliberal, capitalist, and modern/colonial world order.

The techno-utopian enthusiasm around virtuous VR on displacement has mainly come from its purported ability to inspire empathy towards refugees and facilitate better understanding of their plight. Although it was creator of *Project Syria* (2014), Nonny de la Peña, who first described VR technology as a 'visceral empathy generator' (Chapter 3), it was Chris Milk—creator of the UN's first-ever VR film about the displacement of Syrians *Clouds Over Sidra* (2015) (Chapter 4)—who popularised the framing of VR as 'the ultimate empathy machine' in a TED talk (2015). Creators of *Clouds Over Sidra* Gabo Arora and Chris Milk have appeared extensively in the media, speaking about VR's technological affordance of presence and interactivity and its "power to change lives" (Milk and Arora, 2015). De la Peña also talks of VR technology's ability to make subjects and stories more accessible by putting people 'inside' the stories, which fosters people's connections to the story in a way that is not possible with other mediums (de la Peña, 2015d, 2019). Journalists' adoption of VR technology and the emergence of immersive journalism[12] (discussed in more depth in Chapter 3) are said to "reconstitute the audience's emotional involvement in current events" (de la Peña et al., 2010, p.298). The claim is that VR films go beyond mere representation. They change how people see and relate to refugees due to the technological affordances of immersion and presence (de la Peña et al., 2010; Bailenson, 2018; Evans, 2018). They offer more than visuality—they purport to offer

[12] De la Peña et al. (2010, p.291) define immersive journalism as "the production of news in a form in which people can gain first-person experiences of the events or situation described in news stories".

experiences of displacement, allowing viewers to "walk in another person's shoes" as the producer of *Clouds Over Sidra*, Gabo Arora, put it (UN, 2016). In those ways, VR films attempt to forge affective bonds between refugees and the viewer. The virtual environment tugs at the viewer's senses, as well as their experiences and histories; it attempts to open the viewer's capacity to be moved by the encounter with refugees and the simulated experiences of displacement (Nash, 2018). Being moved—to tears, to empathise, to take action—by watching VR films hence comes to frame the technology itself as a pro-social, liberatory tool.

There are two main common threads among techno-utopian claims about VR: firstly, VR technology has the ability to bring closer issues that are deemed 'far away' for the users, whether that be for fundraising, awareness-raising, or journalistic purposes through immersive experiences, and secondly, VR technology is therefore able to inspire empathy or generate *better* understanding than knowledge communicated through other forms of media, which makes it 'good'. The main assumption here—which draws on techno-utopian claims about the technology since the 1980s and 1990s—is that VR has the potential to transcend epistemological, corporeal, political, and historical borders to connect people (Milk, 2015; Milk and Arora, 2015; Zuckerberg, 2021). Here, VR technology is neutral, and the process by which users come to experience displacement is imagined as purely technical, outside of social relations (Hall, 2019a). In other words, it is as if anyone, by *the sheer fact of 'being human'*, can step into the virtual environment or a virtual body without taking into account how global power relations or the social positions of not just the user but also the people involved in the design and production of VR technology shape the encounter (Ahmed, 2014; Hall, 2019a).

Since the mid-2010s, this framing of VR technology has captured the imagination of international organisations, corporations, and tech philanthropists[13]. I argue that a

[13] I note that this thesis focusses on this techno-utopian framing of VR technology in the Euro-American context. In his study of VR technology in Japan, Roquet (2022) asserts the importance of understanding VR technology as rooted in a particular cultural and social context. In other words, the Euro-American way in which VR technology is studied and understood should not be universalised. For example, one important difference between how VR technology is used, according to Roquet, is that in Europe and

particular conception of humanity underpins such techno-utopian framings of VR technology. Today, VR technology plays a significant role in the humanitarian imaginary[14] by promoting a 'humanising' approach to displacement. Virtuous VR is therefore a generative site for examining how the concept of humanity—whether that be in the sense of forging connections between refugees and users on the basis of their common humanity, or generating empathy towards refugees based on their humanity—manifests in different forms.

Empathy and virtuous VR

There is some evidence to suggest that virtual reality technology can raise awareness as well as funds more effectively than conventional methods. For example, in 2015 Amnesty International conducted 'virtual reality Aleppo' street fundraising campaign in the UK and saw a 16% increase in people's donation subscriptions (Amnesty International, 2015). VR film *Clouds Over Sidra*, created by the United Nations Virtual Reality (UNVR) and VR production company Vrse.works, exceeded expectations and raised $3.8 billion at the Third International Humanitarian Pledging Conference for Syria (Anderson, 2015). In the realm of awareness-raising, VR films are framed as countering dehumanising narratives and representations of refugees by putting the user into the shoes of another person or inside news stories to deepen their understanding of refugees' lives (de la Peña, 2015e; Milk and Arora, 2015). It is for these reasons that international organisations like the UN started investing in VR technology since the mid-2010s. In January 2015, the UN's Sustainable Development Goals (SDG) Action Campaign launched UNVR, a project that initially targeted decision-makers such as world leaders but then expanded its scope to using VR technology in campaigns targeted to the general public (United Nations Virtual Reality, no date a). UNVR's website speaks of using VR technology "to bring the world's most pressing challenges home to decision makers and global citizens around the world, pushing the bounds of empathy" (UNVR, no date a). Humanitarian organisations' adoption of emerging technologies for fundraising and branding purposes (the ability

North America, VR is being used to simulate the real world. In contrast, in Japan, VR technology is being used to create imaginary worlds into which people can 'escape' (Roquet, 2022, p. 9).

[14] This is a communicative structure that represents the Global South to the Global North and communicate the imperative to act (Chouliaraki, 2013, p. 138).

to present themselves as cutting-edge organisations) is one way in which they are trying to survive the increasingly crowded, competitive, and marketised global humanitarian sector, particularly since the 1990s (Cooley and Ron, 2002; Statista Research Department, 2010; Chouliaraki, 2013, pp. 6–7).

Against this background, empirical studies such as Schutte and Stilinovic (2017) and Alberghini (2020) have sought to find out whether VR films on displacement have a 'pro-social' impact on participants. Using self-reporting surveys involving 24 students in Australia, Schutte and Stilinovic (2017) concluded that watching *Clouds Over Sidra* in VR increased empathy and engagement compared with watching it in 2D. Similarly using self-reporting surveys, Alberghini (2020) showed *Clouds Over Sidra* and *Step into a Refugee Camp* to 107 middle and high school students in Indonesia to investigate which film was more effective at fostering empathy towards refugees in an educational context. She found that *Clouds Over Sidra* was more effective due to better understanding about refugees' lives, stronger sense of immersion, and a higher level of relatability. This thesis takes a different starting point from such empirical studies, since, firstly, they assume that empathy is 'good' without questioning for whom or what it is good when situated in the current conjuncture. Secondly, they are based on an understanding of empathy that takes the autonomous individual as the basic unit of analysis. Instead, as I explain more in Chapter 2, I use critical feminist literature on affect that challenges this distinction based on an individualised understanding of empathy that hinges on an inside/outside dichotomy.

Moreover, when the scope of empirical studies is extended beyond those on displacement, there is no consensus on whether VR technology increases 'pro-social' attitudes including empathy. Herrera et al. (2018), who compared the effects of VR perspective-taking task against non-VR narrative-based perspective-taking task on homelessness, found that participants who completed the VR-based task displayed more positive attitudes towards homeless people and had a higher rate of taking action (signing a petition). On the other hand, Silverman (2015) argues that while a VR simulation of blindness can increase people's empathy towards people with disabilities, it also misrepresents disability as an individual defect rather than a consequence of social barriers. In a systematic literature review of studies on empathy and storytelling, Christofi et al. (2022) concluded that only three out of the eight studies found that VR

formats significantly increase empathy compared to non-VR formats. Results were more promising when the comparison was between before and after participants have had the VR experience (eight out of 12 studies found that VR significantly increases empathy). Finally, Martingano et al.'s (2021) systematic literature review and random effects meta-analysis found that, given that empathy is multi-dimensional, VR experiences increase emotional empathy (feeling for others) but not cognitive empathy (understanding others' experiences). The lack of consensus is not only to do with whether VR increases empathy but also what empathy is. As a result, the relationship between VR technology and empathy is often expressed in the "aspirational language of potentiality (Foxman, Markowitz and Davis, 2021, p. 2180).

What exactly, then, is empathy? Lanzoni (2018) provides an intellectual history of empathy and how it has travelled across different intellectual fields, such as from aesthetics to psychology and neuroscience, and languages (German to English) over the centuries. Rather than providing an authoritative definition of what empathy is, her work tracks how it has been taken up and engaged with in different contexts.

Despite the different epistemic communities in which empathy is theorised and studied, empathy is generally understood as a multi-dimensional concept with two overlapping aspects: affective empathy and cognitive empathy (Howe, 2013). Affective empathy concerns sharing the feeling of the other person, while cognitive empathy is about perspective-taking and understanding the other person's point of view. This understanding of empathy largely came out of psychological research, coupled with advancements in neuroscience research since the 1980s. In addition to those two dimensions of empathy, Stueber (2020) adds a third dimension to empathy: the ability to engage with others in a social manner (p.1), which relates to how VR technology has been framed as a 'good' technology that fosters empathy.

Overall, Lanzoni (2018) identifies the commonality across various understandings of empathy as something that dissolves and extends the boundaries of the self. While I do not entirely disagree with this understanding, as mentioned earlier, my understanding of empathy starts from the position that there is no autonomous, bounded self in the first place. This contrasts with much of how 'the subject' is understood in empirical studies on virtuous VR, where participants are often asked to

fill out self-reporting surveys. My understanding of empathy is thus informed by critical feminist literature on affect and empathy, particularly by Pedwell's (2014) work on empathy, affective relations, and transnational power relations, which analyses empathy as relational and always contested. Empathy is therefore never straightforwardly 'good' or 'bad'. Empathy describes "the emotional quality of particular human relationships", and the processes of affecting and being affected (Pedwell, p.11).

Before outlining what the current conjuncture is, the next section provides an outline of the Syrian conflict and subsequent Syrian displacement 'crisis', also known as the 'European refugee crisis'. I do this to provide context for the four films about displacement from the Syrian conflict that this thesis analyses. I argue that virtuous VR on Syrian displacement, many of which were made in response to the displacement from the Syrian conflict and the 'European refugee crisis', tells us something about the intersecting historical and political forces that comprise the current conjuncture, and the place of virtuous VR within it.

Syrian conflict, mediatised representations of refugees, and border politics after the 'European Refugee Crisis'

My thesis takes four VR films about the displacement from the Syrian conflict as provocations to analyse the relationship between the concept of humanity and refugees, and to understand the emergence of virtuous VR within the current conjuncture. The Syrian conflict and subsequent displacement were, at the time, highly mediatised events and the migration of refugees from Syria to Europe in 2015—the 'European refugee crisis'—was met with even stricter border enforcement in the EU.

The Syrian conflict began with uprisings as part of a series of revolts, referred to as the 'Arab Spring', that began in 2011 with the self-immolation of vegetable seller Mohamed Bouazizi in Tunisia against police harassment. From Tunisia, protests against authoritarian rule, corruption, and state repression spread to other countries in the region. The protests in Syria were sparked by graffiti calling for the fall of the Assad regime sprayed by some teenage boys at a school in the city of Daraa (BBC News, 2013; Farid, 2017). The Assad regime's security forces then arrested and

tortured 15 boys from the school. The people of Daraa protested their arrest until their return. When they found out that those children had been tortured, protests broke out in other parts of Syria against state repression. Consequently, children have played a symbolic role in the uprising against the Assad regime, as those symbolising a better future as well as innocent and helpless victims of the conflict (Gatter, 2017, p. 92; Carpi and Diana, 2019, p. 139). The protests that began in March 2011 were met with criminalisation, forced disappearance, torture, and killings by the Assad regime. Since then, the uprisings have escalated to a war between the Assad regime and anti-Assad regime and rebel groups, tied up in the geopolitical interests between Russia and Iran (who back the Assad regime) and the US, Saudi Arabia, Turkey (who are the main players backing the anti-regime and rebel groups) and attempts by the Islamic State to capture Syrian territories. As of the end of 2021, there are 6.8 million Syrians refugees around the world, comprising 27% of the global refugee population and making it the top origin country (United Nations High Commissioner for Refugees [UNHCR], 2022). Within Syria, there is estimated to be 6.9 million internally displaced persons (more than 1 in 3 people in Syria) (ibid.).

The Syrian conflict has been a highly mediatised[15] event (Couldry, 2008) despite government repression and the ownership of media outlets by the government and businesses close to the government (Khamis, Gold and Vaughn, 2012). The uses of digital technologies in social movements and protests as a means of information-sharing, coordination, communication have been a topic of scholarly debate particularly since the 'Arab Spring' in the context of the Middle East, where uprisings in various countries have been referred to as 'Facebook Revolution', 'Twitter revolution', or 'YouTube uprising' (e.g. Karagiannopoulos, 2012; Gerbaudo, 2012; Khamis, Gold and Vaughn, 2012). While the uses of digital media in various aspects of life have become more commonplace with the normalisation of digital technologies in everyday usage, particularly since the COVID-19 pandemic[16], scholars have noted

[15] The concept of mediatisation, as opposed to mediation, better captures the ways in which media itself is actively involved in and constitutive of what it is communicating about (Cottle, 2004, pp. 8–9).

[16] According to the UN agency International Telecommunication Union's (2022) estimate, the number of Internet users globally increased by 24% between 2019 and 2022. As of 2022, around 66% of the world's population uses the Internet.

the uses of digital technologies during the Syrian conflict. As the Assad regime banned the entry of news outlets and professional journalists into the country, a range of actors produced and distributed content online: “the Syrian revolt has arguably featured the widest range of examples of digital and social media content produced and distributed by a host of political activists, witnesses, rebels, state agents, soldiers, and torturers” (Al-Ghazzi, 2014, p. 436). Such footage was initially shot on mobile phones and concealed cameras and primarily released on social media. Overtime, as activists smuggled equipment into Syria (Khamis, Gold and Vaughn, 2012), digital video cameras replaced mobile phones and better quality footage began to be broadcast by news media outlets globally (Elias and Omareen, 2014). A lot of the footage was shot from the first-person perspective, depict harrowing scenes of death, violence, and destruction, often positioning the user as a ‘witness’ situated in the scenery and sensing the desperation felt by the person filming the footage (Elias and Omareen, 2014; Smit, Heinrich and Broersma, 2017). Within a closed mediascape, digital and social media content attempted to communicate the realities of war for various purposes.

Although the Syrian conflict began in 2011, another key moment for debates regarding refugees in Europe was the arrival of around one million refugees in 2015, predominantly from Syria but also from Iraq and Afghanistan (UNHCR, 2016b). Since then, there have been moments of mobilisation in support of refugees, sparked by particular representations of refugees fleeing the Syrian conflict. Examples include the death of two-year old Kurdish-Syrian boy Alan Kurdi and a photograph of his body on the beach (September 2015), and the photograph of a bloodied boy, Omran Daqneesh, who had just experienced an airstrike, sitting in the back of an ambulance and looking dazed and staring into the air (August 2016). Much has been written about the circulation and power of such pictures, including the remediation of deaths of migrants, transformation of certain images into ‘icons’, and its impact on politics and people’s attitude towards refugees (e.g. Mortensen, 2017; Ibrahim, 2018; Olesen, 2018; Sajir and Aouragh, 2019; Sohlberg, Esaiasson and Martinsson, 2019; Adler-Nissen, Andersen and Hansen, 2020; Mortensen and Grønlykke Mollerup, 2021; Ray, 2021). The circulation of those pictures led to calls for safe passage, humanitarian assistance, and compassion towards refugees. In the face of continuing movement of people and grassroots solidarity movements resisting border violence, EU countries have

bolstered militarisation and securitisation of borders, as well as criminalisation of solidarity (Fekete, 2017).

According to Akkerman (2018), there are four key aspects to the EU's border policies: border securitisation and militarisation; use of biometric data ('smart borders') to filter people into 'desirable' and 'undesirable' migrants; deportation and detention of 'unwanted' migrants; and externalisation of border control to third countries (p.12). There is now a burgeoning border security industry comprised of biometrics and smart borders, detention, deportation, and consulting, as well as the growing presence of investment companies that benefit from this industry (Akkerman, 2021, pp. 2–3) (more on this in Chapter 3). EU states have militarised borders using digital technologies such as motion sensors, advanced cameras, drones and helicopters for air surveillance (Ahmed and Tondo, 2021; Beaumont, 2022). The financial sector is intertwined with the border security industry, owning shares or bonds, distributing grants, and underwriting loans and credit (Lemberg-Pedersen, Hansen and Halpern, 2020, p. 91). There is thus a close relationship between the technology and financial sectors, the significance of which within the broader context of neoliberal capitalism will be explored in the next section.

EU states have also increasingly externalised their borders so that the border extends beyond the territorial limit of the nation-state. The EU's externalisation of borders, the purpose of which is to pre-emptively stop the movement of people states deem 'undesirable', has roots in the early 1990s (Akkerman, 2018, pp. 12–13). While border externalisation policy has been in place since the Spain-Morocco readmission agreement (1992), the 'European refugee crisis' marked a turning point. Frontex, which was originally established in 2004 to complement the coordination of the common immigration rules within the EU, ceased to be a supportive agency in 2016 (Moser, 2020). Following the 'refugee crisis', it became the main actor in managing the EU border, endowed with more power, geographical reach, and tasks. Its budget has accordingly mushroomed from 6 million EUR in 2005 to 543 million EUR in 2021 (Frontex, no date). Now, Frontex is infamous for its violent border enforcement tactics, including engagement in illegal maritime pushbacks (Freudenthal *et al.*, 2022), uses of intimidation tactics against civil society organisations, and lack of transparency and accountability (Stavinoha, 2021). The EU also established the EU Emergency Trust

Fund for Africa in November 2015, with the stated aim of addressing the "root causes of instability, forced displacement and irregular migration and to contribute to better migration management" (European Union, 2020). In other words, it provides funds to 26 states in Africa in exchange for preventing people from migrating to Europe and accelerating the 'return' (deportation) of migrants (Raty and Shilhav, 2020; Walia, 2021, p. 109). EU states have also concluded various agreements with transit countries to prevent people's movement. In 2016, European governments concluded agreements to work with the Libyan Coast Guard to intercept and send back migrants and refugees from the Mediterranean to Libya. Frontex has deployed air surveillance to intercept boats at sea, collaborating with the Libyan Coast Guard to send them back to Libya (Sunderland and Pezzani, 2022). In Libya, people face horrific violence including arbitrary detention, torture, sexual violence, and forced labour (Amnesty International, 2022). Again in 2016, the EU signed an agreement with Turkey, allowing it to intercept and send back those who crossed irregularly to Greece back to Turkey. In addition to such border externalisation agreements, acts of solidarity have become criminalised even more. One way in which EU states have done this is by weaponising the ambiguity built into the EU's legal framework on smuggling to prosecute people providing sea rescue, lifts, food, and water to migrants and refugees (Webber, 2017). EU states have used criminal law to prosecute left-wing politicians, activists, journalists, interpreters, students, and migrants themselves (Fekete, 2017, p. 4). With 2015 serving as a turning point for EU border enforcement and the production of a 'refugee crisis', the next section discusses the broader contours of the current conjuncture.

What is the current conjuncture? Production of refugee 'crises' under neoliberal capitalism

As I will elaborate in Chapter 3, this thesis provides a conjunctural analysis of virtuous VR on displacement. Conjunctural analysis involves mapping power relations that constitute a particular moment to identify what is specific to this moment (Grayson and Little, 2017; Gilbert, 2019). What are the contours of the current conjuncture? I propose that virtuous VR emerged in the current conjuncture characterised by: the growing securitisation and militarisation of borders by states in the Global North against refugees from the Global South since the 2000s, increasing power of technology companies fuelled by neoliberal capitalism since the 2000s, the

convergence of digital humanitarianism and philanthro-capitalism from the 2010s (Burns, 2019a), and the crisis of neoliberal capitalism from the mid-2010s (Gilbert and Williams, 2022) which led to a destabilisation in racial hegemony and the production of migrant/refugee 'crises' (Danewid, 2022) most notably the 2014 'US immigration crisis' and the 2015 'European refugee crisis'. It is within this context that the various actors involved in the production of virtuous VR—international organisations like the UN agencies and the World Economic Forum, technology companies, NGOs, news agencies and journalists—operate. I see virtuous VR as a post-humanitarian response to migrant/refugee 'crisis', a form of humanitarian communication that emerged alongside the development of neoliberal capitalism and the end of the Cold War.

Neoliberalism is a political and economic project[17] characterised by valorisation of competitive individualism and marketisation; institutionalisation of neoliberal ideologies through government policies and adoption of technologies [18] ; and "authoritarian, racist, and outright antidemocratic practices of government" to support the entrenchment of neoliberalism (Gilbert and Williams, 2022, loc. 11). Since the 1970s, the political project of neoliberalism has been propagated at different levels of society to establish its intellectual hegemony: intellectual networks such as the Mont Pelerin Society and think tanks linked to this network, government positions, the media including television shows and newspaper opinion columns, and business schools and management consultancies in Europe and the US (Srnicek and Williams, 2015, loc. 81). At the same time, there was violent imposition of neoliberalism in Argentina and Chile in the 1970s, as well as the enforcement of structural adjustment programmes[19] by the World Bank and the International Monetary Fund to manage the debt crisis in

[17] Gilbert and Williams (2023) make a distinction between theoretical neoliberalism such as the thinking of Friedrich Hayek, and 'actually existing neoliberalism', "a configuration of ideological narratives, governmental techniques, technological adaptations and organisational procedures" (2022, loc. 11).

[18] Contrary to the popular understanding of neoliberalism as entailing a rollback of the state, it takes on an important role of creating and sustaining markets through various measures (Srnicek and Williams, 2015, locs. 70–71).

[19] Structural adjustment programmes involved the World Bank and the International Monetary Fund loaning money to countries on the condition that they introduce a variety of neoliberal policies, such as privatisation, deregulation, and trade and financial liberalisation. Much has been written about the disastrous impact of such policies (e.g. Federici, 2020).

the Global South in the 1980s (Srnicek and Williams, 2015, loc. 82). By the 1990s, neoliberalism had become hegemonic globally (Srnicek and Williams, 2015). The global financial crisis of 2007/2008 was used by many governments in the Global North to further entrench neoliberalism through austerity policies and to "reinforce the redistribution from poor to the rich" (Hall, Massey and Rustin, 2015, p. 10). The dynamics of neoliberal capitalism, combined with postcolonial despotism, was also one of the factors behind the uprisings against Arab governments ('Arab Spring') in 2011, which sparked the Syrian conflict and has displaced millions of people (Dahi and Munif, 2012; Bogaert, 2013; Gürcan, 2019; Munif, 2020, loc. 115)[20].

Overall, neoliberalism has benefited a global class comprised of a range of actors including businesspeople, corporations, financial speculators, venture capitalists, as well as others whose careers benefit from this system such a consultants, marketing experts, and advisors (Hall, Massey and Rustin, 2015, p. 17). Within this global class, Gilbert and Williams (2022) argue that it is financial and technology sectors that have been the main beneficiaries of neoliberalism. The growth of finance capital and digital technology companies since the 1980s and 1990s have worked hand in hand to create a system of hegemony, allowing them to determine the "general direction of a travel of a given social formation" (Gilbert and Williams, 2022, loc. 11). Digital technologies, in particular, have become part of most people's everyday life, and they continue to be integrated into various aspects of social life. Technology and financial sectors have

[20] Dahi and Munif (2012) and Gürcan (2019) provide a good overview. Prior to Bashar Al-Asad coming to power in 2000, Hafiz Al-Asad (who came to power in 1970) pursued a state-led development model entailing large-scale public investments and state support for the agricultural sector as his support base was the rural population. Concurrently, the regime became an oil exporter and relied on oil revenues to finance such projects, which hindered diversification of the economy and reserves became depleted in the 1990s. There were two waves of liberalisation in Syria, first following the foreign exchange crisis in 1986 when Hafiz Al-Asad implemented 'economic pluralism' that encouraged private investment, liberalised prices, trade, and exchange rates, and reduced subsidies. When Bashar Al-Asad came to power, he introduced policies to attract foreign direct investment for "speculative and non-productive sectors such as real estate, finance and tourism, to the detriment of the productive sector and infrastructure investments" (Gürcan, 2019, p. 97). Bashar Al-Asad implemented further liberalisation over the following years, hitting the agricultural sector the hardest. Inequality deepened, and many people moved to urban areas to search for opportunities. As people's living standards fell and discontent increased, the regime became increasingly authoritarian.

depended upon each other for their expansion, as the financial sector depended on technological advancements to develop, and major technology companies have been able to expand due to the availability of venture capital (Gilbert and Williams, 2022; Narayan, 2022, pp. 4–5).

Neoliberalism has been in crisis from around 2016, initiated by the global financial crisis in 2007/2008. The financial crisis significantly destabilised the legitimacy of neoliberalism, all the while the majority of people struggle to make ends meet and to continue consuming (Gilbert and Williams, 2022, loc. 224). The referendum result in the UK to withdraw from the European Union in June 2016 ('Brexit'), as well as the election of white nationalist politician Donald Trump as the US president in November 2017 signalled a crisis of neoliberalism (ibid.). Those events are also important in relation to virtuous VR, because both Brexit and Trump campaigns generated racist and anti-migrant narratives, primarily by pitting against the 'white working class' against migrants and refugees. As Narayan (2017), Bhambra (2017a), and Danewid (2022) have argued, Brexit and the election of Trump can be understood as political elites' attempt to save neoliberalism by appealing to whiteness. Danewid's conjunctural analysis of the expansion of European border regime and the production of migrant 'crisis' in Europe in 2015-2016 is particularly incisive in connecting the crisis of neoliberalism with the production of migrant 'crises' in Europe and the US.

Events such as the 2014 'US immigration crisis' and the 2015 'European refugee crisis' are significant political events that received extensive media coverage and contributed to the "moral panic over migration" (Danewid, 2022, p. 22). The movement of more than one million people to Europe was a consequential event that has fed into the rise of the right-wing nationalist movements and political parties (Walia, 2021), Islamophobia and further securitisation of migration (Innes, 2010; Rodríguez, 2018; Abbas, 2019), and exposing yet again the facade of Europe as a supposed bastion of human rights, peace, and tolerance (Césaire, 2000; Bhambra, 2017b). In the 2014 'US immigration crisis', almost 69,000 unaccompanied children and more than 68,000 families were taken into custody and detained by the US Border Patrol at the US-Mexico border, most of whom were from Guatemala, El Salvador, and Honduras (Chishti and Hipsman, 2015). During the 2016 presidential election campaign, Donald Trump spoke to and amplified existing anti-migrant and anti-refugee sentiments to gain

votes (Nagel, 2019). These two events were border spectacles (De Genova, 2002; 2005, pp. 242–249), where the border provided a stage on which figures of 'illegal migrants' and 'bogus refugees' were produced and racialised through border enforcement and sensationalist coverage. This occluded the arbitrary and mundane workings of immigration law that produce 'illegality' in the first place.

Drawing on Du Bois' work on 'wages of whiteness', and with reference to the work of Narayan (2017) on the election of Trump, Danewid (2022) asserts that the increasing wealth inequalities due to "deindustrialization, global outsourcing and neoliberal restructuring" (p.29) have led to the erosion of wages of whiteness. Previously, those racialised as white benefited from better working conditions and wages as well as higher social status. However, white people were no longer afforded such privileges due to the encroachment of neoliberal capitalism. This is where the construction of certain movements of people as 'refugee crisis' or 'migrant crisis' emerge as an attempt to "re-supply the wages of whiteness in the absence of wages" (Narayan, 2017, p. 2491). Attempts by European states, pro-Brexit campaigners, and Trump to blame migrants and refugees for various socioeconomic problems and to justify increasingly restrictive and violent bordering practices can therefore be understood as a response to the crisis of neoliberal capitalism.

Another dimension of the current conjuncture is the marriage between digital humanitarianism and philanthro-capitalism (Burns, 2019a, 2019b). Burns (2019a) claims that private companies have increasingly incorporated philanthropy as part of their business models, which they use to generate further profits while simultaneously presenting themselves as 'doing good'. Concomitantly, more and more humanitarian organisations are utilising digital technologies as they are said to improve audience engagement and democratic decision-making (Burns, 2019a, p. 129). With the rise of neoliberal capitalism, the humanitarian sector have become more crowded and therefore more competitive, normalising shorter-term contracts and measurable outcomes (Cooley and Ron, 2002; Chouliaraki, 2013, pp. 6–7; Burns, 2019a). Burns' (2019a, 2019b) main argument is that, in this context, digital technologies play a crucial role in the reconfiguration of the relationship between humanitarianism and the private sector that is always seeking ways to generate profit. There are two dimensions to this: humanitarianism is increasingly becoming another site for capital accumulation

through the adoption of digital technologies, and private business and philanthropic organisations make profit by supplying digital technologies to humanitarian actors (Burns, 2019a, p. 136). Burns (2019a) sums up the latter point in the term 'philanthro-capitalism', referring to "private sector companies intervening in humanitarianism ultimately to accumulate capital" (p.139).

Counter-hegemonic forces have been struggling against those forces of domination and exploitation. Although this thesis focuses primarily on the forces of domination and exploitation given the focus on the conjunctural analysis of VR films on displacement, it is important to recognise at the outset that the forces of domination and exploitation are never all-encompassing. For instance, grassroots humanitarian activities that attempt to centre solidarity rather than charity, as well as various protests in support of refugees, emerged across Europe in response to the migration and refugee 'crises' (Stavinoha and Ramakrishnan, 2021).

This current conjuncture is why it is important to examine virtuous VR on displacement. On the one and, it reflects the convergence between the beneficiaries of neoliberalism (financial and technology sectors) and states' implementations of stricter controls on 'undesirable' people through digital technologies as a way of managing the crisis of neoliberal capitalism. States' adoption of latest technologies to control their borders contribute to the growing profitability and convergence of technology, security, and arms industries (Chapter 3) (Ahmed and Tondo, 2021; Ozkul, 2023). At the same time, the framing of VR as virtuous enables the beneficiaries of neoliberal capitalism to expand markets and generate profits in the name of 'doing good'.

Post-humanitarianism and virtuous VR in neoliberal capitalism

Based on the previous discussions, virtuous VR can be understood as part of what Chouliaraki (2013) calls 'post-humanitarianism' (see also Gruenewald and Witteborn, 2020). Chouliaraki (2013) uses the term to describe a shift in contemporary humanitarian communication from one based on a politics of pity to one based on a politics of irony. In her view, politics of pity encompasses two paradigms of solidarity as salvation (purportedly 'apolitical' humanitarianism that seeks to relive human suffering) and solidarity as revolution (a perspective that similarly calls to relieve

human suffering but based on ideas of justice, influenced by Marxism and 1960s decolonisation movements) (Chouliaraki, 2013, pp. 10–11). Although they seem to be oppositional paradigms, they are both based on 'moral universalism' that, for different reasons, sustain the idea of a common humanity. Politics of pity is other-centred and tends to use sensationalist representations of 'the other', focussing on the vulnerability of the body (e.g. the body in pain), and is said to be assimilationist in the sense that this form of politics takes the existence of a common humanity for granted. Therefore, "the communicative structure of solidarity selectively mobilizes the concept of 'humanity' so as to forge bonds of solidarity with certain populations rather than others and, ultimately, to legitimize a new imperialism of the West as a self-congratulatory community of benefactors" (Chouliaraki, 2013, p. 41). Whether in solidarity as salvation or as revolution, a common humanity forms the basis for empathy and social change. Both politics of pity and politics of irony dehumanise 'the other'; the former represents the victims of injustice as apolitical beings to be pitied and neglects structural change and the question of injustice, while the latter dehumanises victims of injustice by effacing their voice and the question of injustice through "sentimental self-expression" (Chouliaraki, 2021, p. 428). In Chouliaraki's view, there are three major factors behind the shift from a politics of pity to a politics of irony which characterises post-humanitarianism: 1) instrumentalisation of aid and development since the 1990s due to the marketisation and increased competition in the aid sector and the production of administrative knowledge in the field of Development Studies; 2) the death of grand narratives in the post-Cold War era and the concomitant decline of universalistic notions of solidarity and an emerging understanding of solidarity as utilitarian, consumerist, and individualist under neoliberal capitalism; and 3) development of digital media that encourages self-expression, interaction, and personalisation, and an accompanying humanitarian imaginary that encourages interactions with brands rather than deep engagement with the issues at hand. All of these factors map onto the forces that constitute the current conjuncture that I discussed in the previous section.

Informed by neoliberal capitalism, politics of irony is a self-centred politics in the private realm that revolves around personal choice, instant gratification, and feelings of the audience in the Global North. Utilising the technological affordances of digital technologies to encourage self-expression, post-humanitarianism revolves around

"how I [the audience] feel" rather than "reflexive engagement with the political conditions of human vulnerability" (Chouliaraki, 2013, pp.3-4) or an engagement of people's judgement[21]. As a politics that privileges the self in the private realm, post-humanitarianism 'dehumanises' the other by uplifting stories about 'us', the audience in the Global North (Chouliaraki, 2013). Post-humanitarianism, such as celebrity-led campaigns, "unequally distribute the quality of humanity among its communicative figures" and "over-humanizes" the audience in the Global North (Chouliaraki, 2013, p. 187).

The central figure in post-humanitarianism is the ironic spectator: "…an impure or ambivalent figure that stands, at once, as sceptical towards any moral appeal to solidarity action and, yet, open to doing something about those who suffer" (Chouliaraki, 2013, p.2). Drawing on Richard Rorty's neo-pragmatist thought, Chouliaraki explains that the ethics of irony underpinning post-humanitarianism is based on the contingency of self-belief; there is nothing that can be known with certainty outside of one's subjective experience (Chouliaraki, 2013, p.181). Virtuous VR, including the films explored in this thesis, can be understood as emblematic of post-humanitarianism as they meet the needs of ironic spectators well. Virtuous VR is a technology of authenticity that mobilises self-doubt by enabling users to supposedly experience and witness displacement.

Another reason virtuous VR can be considered as a manifestation of post-humanitarianism is because of its privileging of individualised emotions such as empathy over an engagement with judgement (Chouliaraki, 2013)[22]. As discussed

[21] For Chouliaraki (2013), justice comprises the question of 'why' in two ways: "why *this* suffering is important and what there is to do about it but also why suffering, *as a symptom of injustice*, is perpetuated and what can be done to change its conditions of existence" (p.192; italics original).

[22] Chouliaraki (2013) proposes solidarity as agonism, comprised of two elements: emotion and argument or judgement. She believes in the power of empathy, but only if the humanitarian imaginary enables 'the other' to take the centre stage as a historical agent, who may appear in a way that generates feelings of uneasiness or discomfort (ibid., p.193). Judgement involves an engagement with moral arguments, whereby the humanitarian imaginary provides an open space for contesting claims over why one should care occurs. Agnostic solidarity is explicit about the interests that drive specific claims, and "human vulnerability" becomes "a question of global injustice, collective responsibility and

before, various actors have attempted to establish a connection between VR technology and empathy over the years. The potential of virtuous VR to move people is what distinguishes it from other types of media. Tears and emotional reactions are "the medium's proof of concept, evidence that it is working as intended" (Nakamura, 2020, p.60). Regardless of whether virtuous VR *actually* increases empathy (a topic of interest for many empirical studies), the emergence of virtuous VR reflects the current conjuncture characterised by (neo)liberal response to injustices where knowing (more) through feeling is posited as a precursor to social transformation. As Wendy Hui Kyong Chun (2016) points out in her talk: "[t]he assumption there is that if we just had more empathy, if the world was just more empathetic, then discrimination would disappear. If we just had more empathy, there would be more justice. So, when bad things happen, it's because people don't feel enough or don't feel correctly". Although she was talking predominantly about how VR technology is framed as an antidote to racism, her observation captures the essence of the main problem of virtuous VR being posited as a solution to migrant and refugee 'crises'. In fact, my analysis demonstrates that when VR moves people based on a recognition of a generic, common humanity, it reproduces the hierarchy of humanity precisely by overrepresenting Man—the dominant genre of the human that underpins the modern/colonial world—in a post-humanitarian fashion.

1.5 Research questions and method

With the previous discussions in mind, this thesis poses the following research questions:

1) what conceptualisations of 'humanity' undergird VR films on displacement,
2) how do they manifest through VR films, and
3) what are the implications of such conceptualisations of humanity?

To answer those questions, I analyse four VR films that were made in response to displacement from the Syrian conflict, particularly in the aftermath of what has come to be known as 'the European refugee crisis': *Project Syria* (2014), *Clouds Over Sidra* (2015), *Refugees* (2015), and *Sea Prayer* (2017). Throughout the thesis, I use

social change" (ibid., p.195).

quotation marks for the ‘European refugee crisis’ to highlight the manufactured nature of such crises, as the majority of refugees are hosted in the lower and middle income countries[23] (UNHCR, 2022) and the number of migrants as a proportion of the global population has not increased any significantly despite the extensive and sensationalist coverage it receives in the media. Drawing on the UNHCR Population Statistics Database, Fransen and de Haas (2019) found that, between 1951 and 2018, global displacement as a percentage of the world population has decreased in recent decades. While their analysis shows an increase in the proportion of displaced people during this period, this can partially be attributed to the inclusion of Internally Displaced Persons in displacement statistics since 1993 (Fransen and de Haas, 2019, p.13).

The four VR films analysed in this thesis can be watched at home using a commercial VR headset. I used Meta’s Oculus Quest 2. In those films, the user has a 360º view, which means that the scene changes as they turn their head. The films were selected for their ability to shed light on the key features of virtuous VR on displacement. As mentioned earlier, I analyse not only the content of the films (how refugees are represented) but how VR technology functions (how it attempts to rework the relationship between refugees and the audience through particular conceptualisations of humanity), as situated in the current conjuncture. Notions of experience (the selling point of VR is that it is unmediated, that it provides access to ‘real’ experiences and places) and embodiment (VR technology achieves its affordances through its interaction with the user’s body) are central to virtuous VR. For this reason, I followed an explicitly embodied methodology, whereby I watch and analyse the four VR films at three different levels: embodied experience as a participant in the virtual environment and a consumer of the technology; embodied experience outside of the virtual environment; and embodied experience as a researcher. Embodied methodology entailed paying attention not just to what is going on in the films, but also

[23] In total, 83% of displaced people are hosted in low to upper-middle-income countries. In 2021, ‘low-income countries’ (according to World Bank classification) like Uganda, Sudan, Ethiopia, Chad, and the Democratic Republic of Congo hosted 22% of displaced people; ‘lower-middle-income countries’ like Pakistan, Bangladesh, and the Islamic Republic of Iran hosted 21% of displaced people; and ‘upper-middle-income countries’ like Turkey, Colombia, Lebanon, and Jordan hosted 40% of displaced people. ‘High-income’ countries, which include countries in Europe, only host 16% of displaced people (UNHCR, 2022, p. 19).

to my physical and affective reactions, what I bring to the experience (my positionality that necessarily influences my analysis, which I expand upon in Chapter 2), and to different senses (e.g. visual or auditory).

In addition to the embodied analyses of the films, I provide a conjunctural analysis of virtuous VR. Conjunctural analysis involves identifying "convergent and divergent tendencies shaping the totality of power relations within a given social field during a particular period of time" (Gilbert, 2019, p. 6). This entailed mapping the various actors and power dynamics involved in the production of VR technology and its framing as 'good', and situating them in the longer historical period and political developments (Grayson and Little, 2017) spanning the fields of humanitarianism, migration control, emergence of digital technologies, and development (and crisis) of neoliberal capitalism. This approach enabled me to understand what the concept of humanity *does* through virtuous VR on displacement, in particular who is benefitting from the mobilisation of particular understandings of 'humanity' through it. I provide a more detailed analysis of the current conjuncture in Chapter 3.

In terms of the structure of the four empirical chapters, rather than organising them by theme, I decided to dedicate one chapter to each film. This was firstly because I wanted to use each film as a provocation to shed light on different aspects of virtuous VR on displacement and the mobilisation of a particular conceptualisation of humanity, and secondly so that I had enough space to analyse each film. The themes that emerged from structuring the four films in this way can then serve as signposts for future studies that could focus on specific actors or themes identifies in this thesis.

Nevertheless, there are some commonalities between the films that are worth noting at the outset. For example, with regard to the content of the films, 1) centrality of refugee children and 2) the relationship between gender, race, and refugees' humanity are recurring themes. As shown in Table 1 (p.74), the protagonists of *Project Syria*, *Clouds Over Sidra*, and *Sea Prayer* are all children, albeit represented in different ways. *Project Syria* covers the targeting of children in the Syrian conflict, and how their futures are being lost to the conflict and displacement, most evidently symbolised by the white, cut-out figures of children. Such ideas of generic childhood and lost childhood are similarly invoked in *Clouds Over Sidra* and *Sea Prayer*. As mentioned

in Chapter 7, despite enthusiasts of virtuous VR claiming that it offers something different to conventional representations of refugees, the films analysed in this thesis demonstrate that they continue to reproduce oft-criticised relationship between refugeehood and innocent, feminised, and infantilised humanity that position refugees as ideal recipients of humanitarian aid. In this relationship, humanity is always gendered and racialised, especially in terms of who gets to be seen as a child and as innocent in the first place. Chapters 4, 5, and 6 show how these different dynamics interact and shape the contours of childhood and humanity: Chapter 4 focuses on childhood and innocence, Chapter 5 focuses on (Muslim) refugee men and humanity, and Chapter 6 focuses on the generic figure of the child and the idea of a shared future.

In addition to the representations of refugees, there are some commonalities with regard to 1) the creators of the films and 2) the topic of immersive journalism. The World Economic Forum (WEF) emerged as a major investor into virtuous VR, as discussed in Chapters 3 and 4. As noted by previous studies like Gruenewald and Witteborn (2020), the UN is another major organisation invested in the technology through collaborations with technology companies, as discussed in Chapters 4 and 6. Immersive journalism, a concept proposed by de la Peña et al. (2010) and discussed in detail in Chapter 3, runs through Chapters 3, 5, and 6. As considered in those chapters, virtuous VR on displacement from the Syrian conflict was one of the ways in which the concept and practice of immersive journalism was being developed in the mid-2010s, with the strong support of technology companies like Google and Samsung (Kangasniemi, 2021). Delving deeper into those commonalities in future studies may generate valuable insights into who invested and continue to invest in virtuous VR on displacement or virtuous VR in general (as in the case of WEF, as it announced metaverse-related initiatives in 2022 and 2023).

Finally, while I limit the scope of my thesis to VR films on displacement, I situate virtuous VR films on displacement within a broader corpus of experience-based campaigns, defined by Cañas (2016) as campaigns that rely on “the philosophy of “standing in the shoes of a refugee” as a strategy which seeks to produce empathy…by inviting or forcing individuals to experience part of the physical and emotional discomfort that refugees may experience”. Recent examples of campaigns that attempt to ‘simulate’ the lives of refugees include Jesuit Refugee Service’s online

role-playing activity ‘A Journey into Exile’ (Jesuit Refugee Service Canada, no date), Crossroads Foundation’s 75-minute real-life simulation ‘A Day in the Life of a Refugee’ (which was brought to WEF in Davos in 2019) (Crossroads Foundation, no date), and Act for Peace and Concern Worldwide’s ‘ration challenge’ where people are sent a ‘ration pack’ to eat for a week, which mirrors what “a Syrian refugee living in a camp in Jordan” eats (Act for Peace, no date; Concern Worldwide, no date). In my view, the common thread among such campaigns is the assumption that simulating or experiencing displacement yourself will generate new or better understandings of displacement, with the expectation that this will lead people to act more empathetically or compassionately towards refugees (see also Sirriyeh, 2018, p. 69). This thesis focuses on virtuous VR, since it is a particularly interesting example in the context of increasing use of digital technologies for humanitarian purposes, and the growing power of technology companies.

1.6 A note on the term ‘refugee’

> I thought of how my first retelling was in an asylum office in Italy: how merciless that, with the sweat and dust of escape still on our brows, we had to turn our ordeal into a good, persuasive story or risk being sent back. Then, after asylum was secured, we had to relive that story again and again, to earn our place, to calm casual sceptics. Every day of her new life, the refugee is asked to differentiate herself from the opportunist, the economic migrant. …Am I a real refugee? The implication burned. (Nayeri, 2019b, p. 8)

This section clarifies my usage of the term ‘refugee’. I will do this after discussing the debates surrounding the terminology of ‘refugee’ and ‘migrant’, and the role of media in those debates. The act of categorisation itself is political and dynamic as it produces in/exclusions, and in describing something one is also forming and changing the very thing one is describing (Allen *et al.*, 2018; Crawley and Skleparis, 2018). With regard to refugees, Zetter (1991) highlights the interplay between society, experiences of refugees, public policy, and bureaucratic practices in the construction of the ‘refugee’ label. Tied to material benefits, labels and categories related to the movement of people simplify people’s realities for legal and political purposes (Castles, 2006). Categories are also embodied, taken up, utilised, and refused by the people for whom

it is used (Hacking, 2006; Andersson, 2014). As such, while the term 'refugee' refers to a specific legal status as enshrined in the Refugee Convention (1951)[24], it is a dynamic category that goes beyond the confines of law. In short, the category of 'refugee' should not be taken for granted—what Crawley and Skleparis (2017) terms 'categorical fetishism'. For researchers, taking categories such as 'refugee' and 'migrant' for granted could bolster the nation-state migration apparatus (Dahinden, 2016). This is also related to the function of disciplines and disciplinary boundaries, which naturalises certain categories—for example, 'migrants' in migration studies (ibid.).[25]

The media plays a significant role in the construction and representations of refugees, oftentimes portraying them as a threat, voiceless victims, criminals, job-stealers, sexual predators, and/or liars (Malkki 1996; Rajaram 2002; Innes 2010; Parker 2015; Chouliaraki and Stolic 2017; Esses et al. 2017; Rodríguez 2018). Representations of "super-refugees" (Fiddian-Qasmiyeh 2017) and 'grateful' refugees (Nayeri, 2019b) supposedly generated to counter negative and dehumanising representations, are equally found to be problematic in recognising the diversity, complexity, and 'messiness' of refugees' lives, just as any other humans'. The imaginaries and popular

[24] The Convention defines a refugee as someone who, "owing to well- founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 1951, p. 14).

[25] Research on 'refugees' and 'migrants', as well as the fields of refugee and forced migration studies and migration studies can be said to fall into this trap. This is why Dahinden (2016) calls for a 'de-migrantisation' of research on migration and integration. Taking the category of 'migrant' for granted not only risks reproducing methodological nationalism but also boosts the 'migration apparatus' and produces knowledge that posits migrants as already different from the norm, i.e. the population at large. A similar critique can be levelled against refugee and forced migration studies, which partially differentiates itself from migration studies according to a humanitarian logic (Wherry 2015). Lubkemann (2008) suggests researching displacement not as a "type" of migration but as a disruption to "socio-spatial management strategies" (i.e. mobility-based strategies) that sustains people's life. From this perspective, immobility becomes as much an important object of study as movement. Critical mobility studies offers a way in which researchers can overcome such confines (Sheller, 2020). This perspective starts from the premise that displacement (mobility) is related to staying put or being fixed in place (immobility), and that power relations pervades this relationship.

constructs associated with the term ‘refugee’ is demonstrated in the debate in mainstream English-language media over whether to use the term ‘migrants’[26] or ‘refugees’, a debate that took place when the ‘European refugee crisis’ began to attract attention. For instance, while BBC chose to focus on the “humanity” and “human stories” rather than to debate the choice of words (‘Why the BBC uses the word “migrant”’, 2015), Al Jazeera (2015) used the term ‘refugee’ instead of ‘migrant’ to describe people crossing the Mediterranean, due to the latter being a dehumanising and pejorative term. Al Jazeera’s decision was echoed by *The Guardian*, which said that it will avoid using ‘a catch-all label like “migrants”’ and use more specific terms like ‘”refugees”, “displaced people”, and “asylum seekers”’ (Marsh, 2015).

Al Jazeera’s choice to use ‘refugee’ rather than ‘migrant’ is noteworthy as it encapsulates a popular dichotomy. In general, this distinction is drawn according to whether someone is forced to flee (for political reasons, who are therefore victims and deserving of humanitarian concern) or moved voluntarily (for economic reasons, to better one’s life; therefore not deserving of humanitarian concern). This distinction then forms the basis for the hierarchy of deservingness: those who were forced to flee are seen as more deserving of support (Kyriakidou, 2021). Historical studies fill an important gap in explaining the instability of this dichotomy. For instance, Long (2013) analyses how ‘refugees’ were separated from ‘migrants’ to ensure protection from persecution in the 1950s, which ultimately ended up working against refugees by privileging short-term humanitarian assistance over durable solutions that include secure economic livelihoods. Similarly, Karatani (2005) demonstrates that institutional concerns inadvertently led to the separation of ‘refugees’ from ‘migrants’. Others have also highlighted the blurred distinction between voluntary/forced and migrants/refugees. Richmond (1993) proposed the framework of reactive to proactive continuum as an alternative to the forced versus voluntary framework, while others have taken up the idea of the ‘migration-asylum nexus’ (Castles, 2003) to reflect the difficulty in clearly distinguishing migrants and refugees due to the variety of reasons for which people move, even though the circumstances under which they make decisions may be highly constrained. As people decide to move in a world characterised by global economic inequality and structural violence rooted in

[26] ‘Migrants’ is a similarly contested term like ‘refugees’, though the former has no official, legal definition.

colonialism and neoliberal capitalism (Walia, 2021), the line between politics and economics is blurred (Raia, 2015; Holmes and Castañeda, 2016; Rodríguez, 2018). Attempts to cement the distinction between 'refugees' and 'migrants' therefore reproduce a hierarchy of who is more 'deserving' of being accepted or rescued (Kyriakidou, 2021). This distracts from and works in favour of state efforts to govern and contain the mobility of some people, and works against efforts to ensure the safety, dignity, and life of people on the move (Abdelaaty and Hamlin, 2015; El-Enany, 2016; Crawley and Skleparis, 2018).

To be clear, I am not endorsing the view that all distinctions between people who move should be collapsed, or that their reasons for moving do not matter. My point is that it is important to always consider the politics of categorisation, as well as the historical developments and the material impacts of categories such as 'migrant' and 'refugee'. At the same time, it is worth bearing in mind Bivand and Oeppen's (2018) argument that merely pointing out the complexities of the distinction between 'forced' and 'voluntary' is insufficient, given that these conceptualisations often determine migrants' access to protection and life chances. While there are no clear-cut solutions, a good place to start is to refuse to take for granted policy- and state-centric categories, and to explore the material implications of how they work (i.e. what such categories *do* in the lives of migrants), and to remain attentive to the complicity of academics in upholding various structures of injustice.

In addition to the debates surrounding the distinction between 'refugees' and 'migrants', 'refugee' itself is a contested category. For example, people who may meet the criteria for refugee status under the Refugee Convention (1951) may decide not to apply for refugee status or give up applying to seek other paths. For example, based on interviews with Eritreans in Kampala, Uganda, Cole (2018) found that while some of the interviewees emphasised the unequivocal importance of refugee status, others had given up applying and/or sought other means. For instance, people had done so due to the financial burden and the unfair and at times violent treatment by officials during the application process; unexpected lack of benefits provided by refugee status; and the negative perceptions attached to refugee status. For one interviewee, refugee status connotes 'selfishness' for abandoning their country and family members (Cole, 2018, p. 14). Refugees may also prefer to apply for asylum in a particular country. For

instance, Jamal, who fled Sudan to Europe in 2015, chose not to apply for asylum in France despite encouragement by aid workers and lawyers as he wanted to study in the UK and believed he would have a better life there (Trilling, 2018). On the other hand, there are people like the Vietnamese-American author Viet Thanh Nguyen (2018) who proudly calls himself a refugee. For people like Nguyen, it is a category that he identifies with, while for others it may be a legal status that does not have a strong bearing on their sense of identity.

Bearing these debates in mind, I use the term 'refugee' to encompass the imaginaries and popular constructs of people categorised, discussed, and represented as 'refugees', regardless of whether they fit the legal category as defined by the Refugee Convention[27]. This understanding of the term 'refugee' is akin to what Nyers (2006, xv) calls 'refugeeness': an ambiguous concept that "is concerned with the various qualities and characteristics that are regularly associated with and assigned to refugee identity" (ibid.). There is no essential refugee 'identity'; there is no prototypical refugee. And yet, there are specific imageries and preconceptions associated with the category 'refugees' that the media, including VR technology, constructs. Using the term 'refugee' in this broad sense may lead to a loss of analytical clarity and the conflation of different people's needs and experiences. However, for the purposes of this thesis, a broader use of the term better reflects the figures of refugees mediatised in virtuous VR films. It is not clear whether the people who appear in the four films I examine are refugees according to the Refugee Convention, but they are nevertheless mediatised as such. A broader use of the term can capture the instability of its categorical boundaries and enable me to tease out the oft-homogeneous ways in which refugees are constructed, while remaining critical of such constructions. Some scholars have taken up the term 'forced migrants' to indicate this broader meaning as it "not only [refers to] refugees and asylum seekers, but anyone forced to leave their homes by violence, persecution, development projects, natural disasters or human-made catastrophes" (Castles, 2006, pp. 7–8). However, the usage of this term has not entered popular discourse and

[27] It should also be noted that the refugee status as defined in the Refugee Convention is already broader than is commonly thought, since it is a declaratory status; in other words, a person is a refugee when they meet the criteria in the Convention, not when a state recognises them as a refugee (UNHCR, 2019, p. 17).

media. For this reason, I use the term ‘refugees’ throughout this thesis.

1.7 Chapter overview

Chapter 2 provides an overview of my method and methodology. I explain my usage of critical feminist literature on affect, and position my approach to analysing VR films as an embodied methodology. I argue that an explicitly embodied methodology is particularly important for capturing the experiential aspect of VR films. I describe my multi-level analysis at three levels: embodied experience as a participant in the virtual environment and a consumer of the technology, embodied experience outside of the virtual environment, and embodied experience as a researcher. I conclude this section with a note on my positionality and my relationship to this research, and limitations of my method and methodology.

Chapter 3 uses *Project Syria* and its creator Nonny de la Peña to analyse virtuous VR from the perspective of political economy. It serves as the connecting thread for the subsequent chapters as it highlights who actually benefits from the mobilisation of a generic, universalised humanity through virtuous VR. I identify de la Peña as a key figure in establishing a link between VR technology and empathy, and secondly in the development of virtuous VR due to her connections to figures and organisation who later became powerful advocates of it. I provide some examples of VR ‘for good’ by major technology companies, journalism, and humanitarian organisations, and argue that virtuous VR is an example of the convergence between philanthro-capitalism and digital humanitarianism (Burns, 2019b). I then ask what the framing of VR as ‘good’ obfuscates. I answer this from two perspectives: how VR technology is part of the border-industrial complex that benefits from the policing, outsourcing, and securitisation of migration, and how VR technology is part of contemporary digital economy that can be characterised as modern/colonial. The concluding section proposes what the current conjuncture comprises.

Chapter 4 on *Clouds Over Sidra* introduces what I call a ‘humanising’ approach to displacement. This approach is composed of three elements: invocation of humanity as a collective subject through the recognition of refugees as ‘fellow humans’; assumption that this recognition leads to empathic identification; and a logic of

inclusion. I argue that *Clouds Over Sidra* attempts to 'humanise' refugees through the figures of children intertwined with notions of innocence and dependency, and through what I call technological disembodiment which engenders a particular epistemology of displacement. I highlight the limits of a humanising approach to displacement, and conclude that virtuous VR's claim to 'humanise' refugees ultimately works to distract from how actors involved in virtuous VR benefit from the modern/colonial world that contribute to displacement.

Chapter 5 is on *Refugees*, which was produced during immersive journalism's initial period of hype in 2015-2016. While the film is an example of virtuous VR as it seeks to provide a humanising perspective on the 'European refugee crisis', it uses a different strategy to *Clouds Over Sidra* and *Sea Prayer*. While the two films are driven by linear narratives told by particular figures of refugees (girl refuge and refugee father respectively), *Refugees* needs to report the facts as a journalistic piece while attempting to guide the user towards an intended perspective. I use the term experiential dissonance to describe the strategy *Refugees* uses to create space for the user while directing them towards a humanising perspective. I also consider the importance of the dynamics that shape the politics of 'humanisation': how refugees' humanity is racialised and gendered, and the importance of going beyond the framework of difference/sameness. I conclude with the suggestion that virtuous VR created by explicitly humanitarian actors (as the other films) may provide a better avenue for corporations seeking to profit from digital humanitarianism.

Chapter 6 on *Sea Prayer* analyses the film as remediation of the photograph of Alan Kurdi. I also examine the film as an instance of Google's (attempted) entry into immersive journalism, which is part of the company's broader for-profit philanthropy efforts. Drawing on comments about the power of stories to counter 'dehumanisation', I complicate this claim by pointing out two assumptions: that recognition of a common humanity will lead to empathy, and that more empathy will lead to a more just world. After highlighting such limits of a humanising approach to displacement, I analyse the film using the framework of 'reproductive futurism' (Edelman, 2004) in which the terrain of politics becomes limited by an appeal to protecting the future of the Child. I make the case that there is a tension in *Sea Prayer*. While it provides more context to why people have fled Syria, thus illuminating why specific people's futures are at risk, it

also obfuscates such specificities through the mobilisation of a generic, universalising humanity as symbolised by the Child. I conclude by emphasising the centrality of a generic, universal humanity to the convergence between digital humanitarianism and philanthro-capitalism, and to the framing of displacement as primarily a humanitarian issue.

The **Conclusion** brings together the four main chapters to reiterate my findings, and concludes with two suggestions. First is the refusal of the economy of humanisation: a shift from attempting to define humanity—which ends in a never-ending search for purity—and towards structures that demand 'humanisation' of refugees in the first place. The second related suggestion is a shift away from an understanding of displacement as first and foremost a humanitarian issue. This would enable a renewed focus on the relationship between displacement and the modern/colonial world. In this reconceptualisation, the responses to displacement would necessarily entail a shift from rescue, charity, and empathy to challenging imperial warfare, capitalist dispossession, environmental destruction, and the nation-state system.

2. Method and Methodology

2.1 VR as affective technology: Critical feminist approaches to affect

VR films are said to go beyond mere representation: they are felt. They supposedly offer *experiences* of displacement, enabling users to take others' perspectives and to visit places they would not be able to in real life. Virtuous VR thus attempts to forge affective bonds between 'refugees' and 'the user', actively constituting those categories as the encounter unfolds. Since VR films are claimed to be superior to other kinds of media like text or 2D films[28] by supposedly offering 'an actual experience', it is crucial for researchers to engage with methodologies that attend to the embodied aspects of VR films.

Given the centrality of experience (the selling point of VR is that it is unmediated, thus what it provides is simulation not representation) and embodiment (VR technology achieves its technological affordances through its interaction with the user's body) to VR technology, I understand it as affective technology. Affective technology is distinguished from the idea of 'affective computing' (Picard, 1995). Although both share the emphasis on the importance of emotions, affective computing refers to computing systems that can sense, identify, and respond to human emotions. In contrast, I use the term 'affective technology' to refer to how virtuous VR on displacement seeks to move the user in order to (re)make the affective relationship between the user and refugees.

One of the key points of contention among the literature on affect is the distinction between emotions and affect. For example, Massumi (2002) distinguishes the two, saying that emotions are subjective while affect is not. For him, affect is about the body and its capacity to affect or to be affected. Through this conceptualisation of affect, he attempts to challenge what he sees as the discursive bias of cultural theory that has had the effect of downplaying change, movement, and the body (Massumi, 2002). Other scholars, like Ahmed (2014), have challenged this strict distinction between emotions and affect. For instance, she proposes a sociality of emotion model in

[28] However, 2D films can also be experiential and sensuous. For example, see Marks and Polan (2000) and Sobchack (2004).

opposition to a psychological model of emotion, which theorises emotions as subjective, individual, psychological states. She refers to the psychological model as an "'inside out' model of emotions", whereby "I have feelings, which *then* move outwards towards objects and others, and which might then return to me." (Ahmed, 2014, p.9; italics original). Her sociality of emotion model sees emotions as social and cultural practices, rather than something that atomised individuals possess. Rather than taking the inside (I) and the outside (objects and others I come into contact with) as a given, her model proposes that "it is through emotions, or how we respond to objects and others, that surfaces or boundaries are made: the 'I' and 'we' are shaped by, and even take the shape of, contact with others" (Ahmed, 2014, p.10). Similarly, Ngai (2005) uses emotions and affect interchangeably; she understands the difference between them as "a modal difference of intensity or degree, rather than a formal difference of quality or kind"[29] (p.27). This conceptualisation of affect works in her book on 'ugly feelings' precisely because her analysis relies on working with, rather than resolving, the subjective/objective problematic that the emotion/affect distinction is supposed to solve (Ngai 2005, p.28). For instance, her analysis of 'tone'[30] of a text is possible because it is irreducible to a reader's emotional response to it (subjective) or what the text represents (objective) (pp.29-30). As she puts it, "Tone *is* the dialectic of objective and subjective feeling that our aesthetic encounters inevitably produce" (p.30). Following Ngai (2005) and Ahmed (2014), this thesis does not make conceptual distinctions between affect and emotions because I am interested in how virtuous VR attempt to forge particular subjectivities and relations through the mobilisation of a generic humanity precisely by blurring the distinctions between inside/outside and self/other (Pedwell, 2014, p. 1). In this thesis, I therefore draw on feminist theories on affect, particularly critical approaches that are attentive to the ways in which people come to know through affect, and how they are imbued in transnational power relations (Pedwell and Whitehead, 2012), such as Hemmings (2012), Ahmed (2014), and Pedwell (2014).

[29] She writes that affect is less formed and structured than emotions, but is not structureless; it is less "sociolinguistically fixed" but not meaningless; and it is less organised but is not devoid of organisation altogether (p.27).

[30] She defines 'tone' as "a literary or cultural artefact's feeling tone…its global or organizing affect, its general disposition or orientation toward its audience and the world" (Ngai, 2005, p. 28).

In the next section, I propose an embodied methodology for analysing VR films on displacement due to the lack of engagement with explicitly embodied methodologies in both empirical and theoretically oriented work[31]. As mentioned in the introduction, empirical studies that seek to measure empathy before and after watching a VR film about refugees or comparing the results between 2D and VR formats (for example, Schutte and Stilinović, 2017; Shin, 2018; Alberghini, 2020) can be considered as an attempt to capture emotions following the inside out model. They reduce emotions to the individualised, psychological realm by adopting self-reporting and measurement scales such as the Interpersonal Reactivity Index (Davis, 1980). Ahmed's (2014) sociality of emotion model is therefore useful in situating the affective relations that emerge from virtuous VR on displacement in wider social, cultural, and political contexts (Pedwell, 2014). Theoretically oriented work with a focus on discursive and representational dimensions of VR films on displacement can also do more to methodologically engage with the embodied and affective dimensions of VR technology in a more explicit way. In theoretical work, the experiential is often subsumed under the textual, and the perspective of embodiment that deals more expressly with how researchers experience the films is largely absent in the analysis. Rather than taking for granted one's perspective as a researcher and as a user, embodied methodologies encourage an understanding of VR technology as producing particular kinds of 'users' and 'refugees' and shaping the affective relations between them. This approach is also in line with this project that seeks to go beyond investigation of the representations of refugees to consider the production of particular epistemologies of displacement and social relations through VR technology (McLuhan, 2013; Towns, 2022).

2.2 Embodied methodology for analysing VR films on displacement

Taking seriously Vacchelli's (2018) comment that migration studies has not embraced the 'embodied turn' in social sciences, I use an explicitly embodied methodology that attune[32] (Kanngieser in Kanngieser and Todd 2020) to the body and centres it as a

[31] By this I mean research that does not involve participants or attempt to measure certain aspects of VR films as empirical work does.

[32] Drawing on Indigenous scholars from the Pacific, Kanngieser in Kanngieser and Todd (2020) defines

source of knowledge in the analysis of the four VR films. This is especially important when analysing technology that utilises embodiment like VR, and in the emerging field of digital migration studies that researches the relation between migration and digital technologies (Leurs and Smets, 2018). This methodology is also in line with my approach to research, which I outline in Section 2.7. Understanding all research as an embodied process[33] means that my positionality and how I experience the world are woven into my thinking and doing as a researcher.

In defining what 'embodiment' means in this context, I turn to Trinh T. Minh-ha's words: "…we do not have bodies, we are our bodies, and we are ourselves while being the world. …We write—think and feel—(with) our entire bodies rather than only (with) our minds or hearts." (1989, p. 36). In short, embodiment can be defined as the experience of being bodies in the world. Embodiment is thus aways relational, in the sense that we are our bodies in relation to other bodies, and within the wider world in which we live. My thinking is also informed by scholars from a variety of backgrounds who foreground embodiment in their work. For example, feminist standpoint theorists like Collins (1999), Harding (1992), and Haraway (1988) have developed theories of situated knowledges, connecting embodiment with the politics of knowledge production. Postcolonial feminist Mohanty (2003) has similarly argued for "a political of location" that resists homogenisation and depoliticisation of experience under the banner of "women's experience", while decolonial scholars like Mignolo (2002) and Lugones (2010) have discussed coloniality and geopolitics of knowledge production by asking scholars to pay attention to who produces knowledge and where people speak from. Feminist posthuman scholars like Haraway (1991) and Hayles (2002) have challenged the nature/culture dichotomy and the liberal conception of autonomous individuals. Phenomenological approaches such as the work by Ahmed

attunement as "to bring into tune, to find resonances or moments of intersection. …a laborious, humbling, and self-reflexive process" (p.390). It involves recognising one's presence and relationship to land, place, and beings (non/human), as well as the limits to one's knowledge, and "reckoning with…being a guest, a trespasser, and a colonizer" (ibid.).

[33] Even when embodiment is not the object of study as in my case or when researchers are working with quantitative data, researchers use their senses; researchers affect and are affected by others and objects we encounter and the environments we navigate and in which we conduct research; and being both discursive and corporeal, bodies are one of the sites where power manifest (Ellingson, 2017).

(2006, 2014), Fanon (2008), and Salamon (2018) have contributed to a rich body of literature on embodiment, race, and gender. Furthermore, Indigenous scholars have long called attention to the connections between land, knowledge production, coloniality, colonialism, and power relations (Meyer, 2008; Moreton-Robinson, 2013; Todd, 2016; Tuhiwai Smith, 2021). However, it is important to note that engagement with Indigenous worldviews and epistemologies require a careful, ethical, and self-reflexive approach so that Indigenous thinking is not simply 'included' into Eurocentric thinking through a logic of extraction (Todd, 2016).

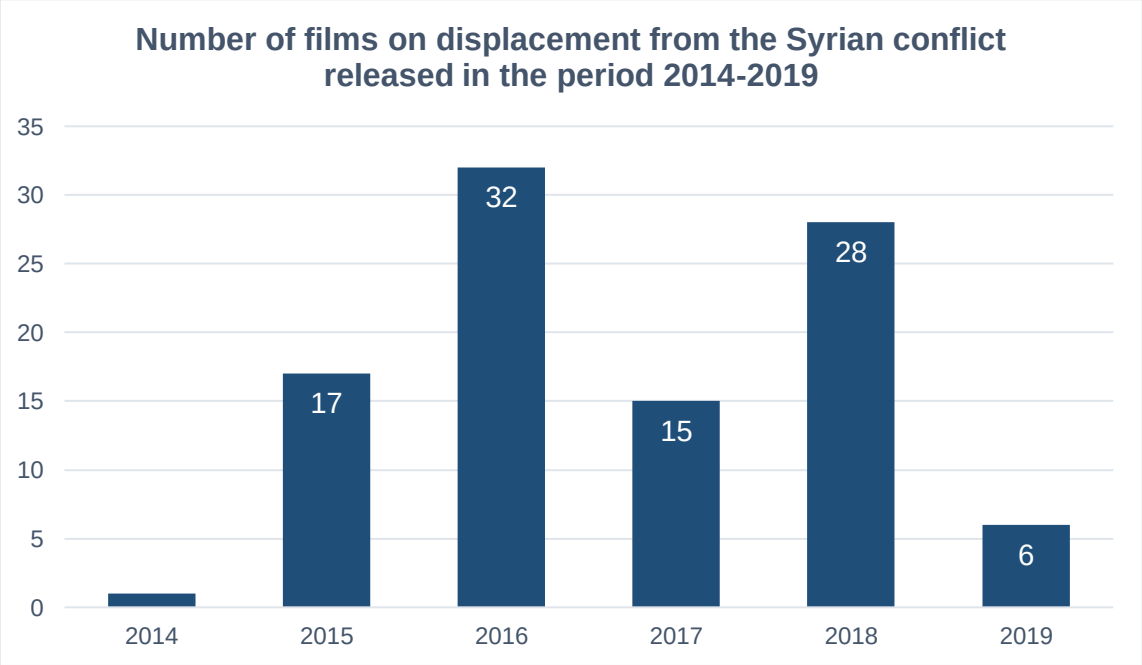
Embodiment as 'being a body', then, and the relations that we build through our being, recognise the impossibility of separating the mind from the body. Being, thinking, knowing, feeling all happens through being bodies. What is important to note here is that knowledge derived through embodiment is not necessarily a 'truer' form of knowledge. Accepting this would replicate the sometimes-implicit claim VR advocates make, that virtuous VR *is* a better way of understanding displacement because it is an 'actual experience'. Yet, there is no seamless transition from experience to knowledge, as postcolonial and Black feminist scholars have pointed out (Combahee River Collective, 1977; Collins, 1991; Mohanty, 2003) (this is explored in Chapter 4). Instead, knowledge from one's own experience derives from an active process of making sense of it within a particular historical and political context (Mohanty, 2003). In this sense, experience is never purely concerned with an autonomous, individual subject as understood in liberalism.

2.3 Existing corpus of VR films on the displacement of Syrians

Before explaining how I conducted this research, this section provides an overview of the existing corpus of VR films on the displacement from the Syrian conflict, followed by a section on the four films I selected to analyse. Using the MIT Docubase database, the VR Nonfiction: A Mediography database, and internet search on Google and YouTube, I identified a corpus of VR films on the theme of displacement from the Syrian conflict. For the former two databases, I selected the most relevant tags ('displacement', 'migration', 'refugee crisis', 'refugees', and 'syria' for MIT Docubase and 'Migration & Displacement' and 'Syrian Civil War' for VR Nonfiction: A Mediography) to narrow down the search and filtered through the relevant films. For

the search on Google, I used key terms such as 'refugees', 'virtual reality', 'Syria', 'Syrian war', 'migration', and 'migrants' in different combinations. On YouTube, I used the keywords 'syria' 'refugees' and used the filter to select 360° videos.[34] This generated 110 results. From this dataset, I excluded experiences that were not in fact VR (360° videos), and experiences that cannot be accessed either on YouTube as VR or on the Oculus Quest 2 Store[35], resulting in a final list of 99 VR films. *Project Syria* was the first VR film on the displacement from the Syrian conflict, released in 2014. Figure 1 shows the progressive increase in the number of VR films on the displacement from the Syrian conflict from 2014 through 2016, likely due to the increase in the media attention it received during the 'European refugee crisis' that peaked in the summer of 2015. The number of films then drops in 2017, increasing again in 2018.

Figure 1: Number of films on displacement from the Syrian conflict (2014-2019)



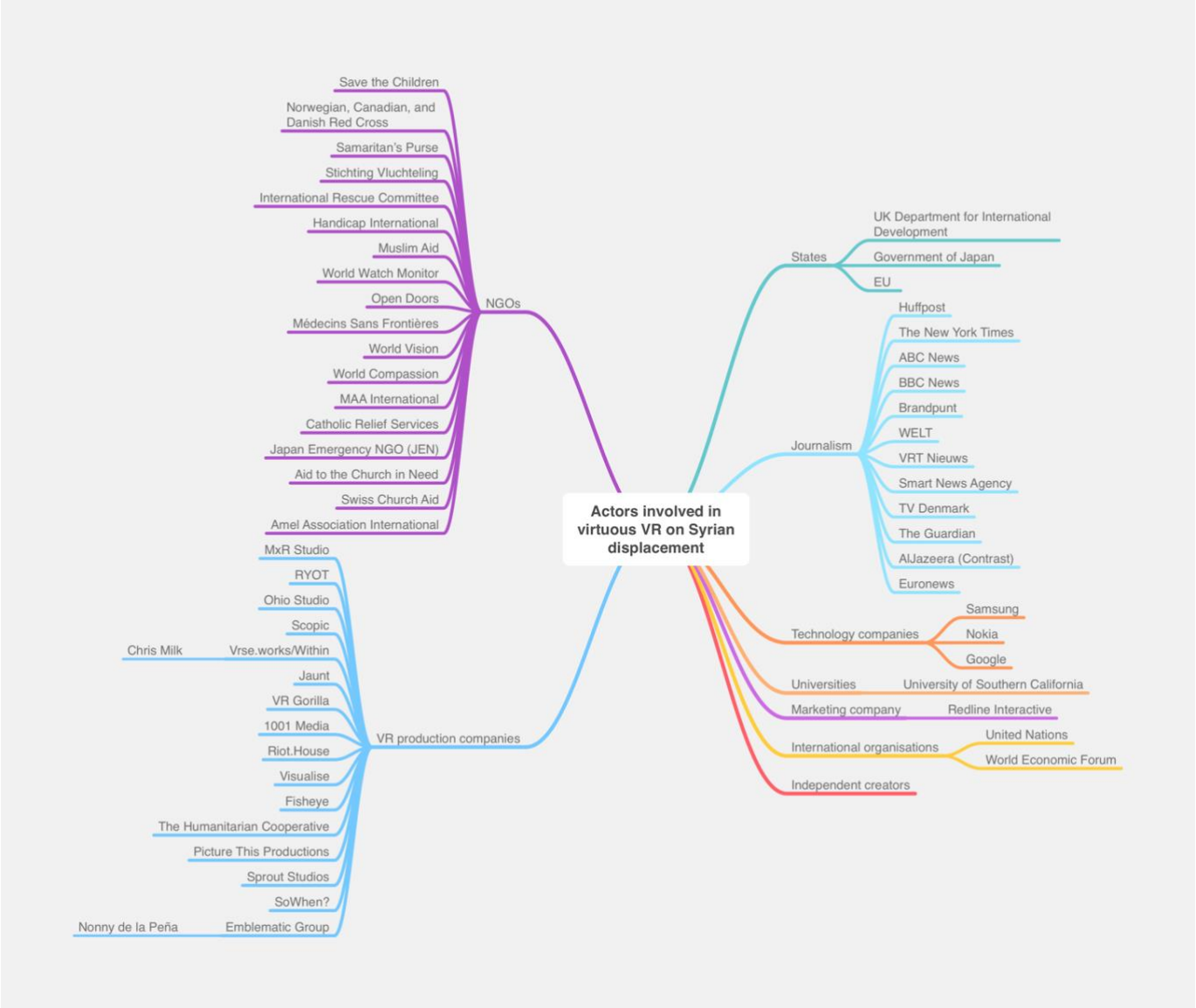
In terms of the main actors involved in the creation of VR films on displacement from the Syrian conflict (Figure 2), NGOs produced 33% of the films, followed by journalistic outlets (news organisations and journalists) at 24%, VR companies at 11%. Individuals,

[34] I also performed a search using the filter 'VR 180' but this yielded no results.

[35] There were a few experiences that could only be accessed on the earlier version of Oculus store, such as Oculus Rift or Oculus Go.

referring to mainly YouTube videos produced by individuals, not for any particular organisation or a cause, makes up 10%. The UN contributed 7% of VR films on Syrian displacement. Among NGOs, World Vision produced 13 films in the period 2014-2019, 9 of them in collaboration with Al Jazeera's VR studio Contrast. Other NGOs involved in the creation of VR films, in order of the number of films produced in the same period, are: International Rescue Committee (5 films), Dutch NGO Stichting Vluchteling (4 films), Médecins Sans Frontières (4 films), Australian NGO MAA International (4 films), International Committee of the Red Cross (4 films), Save the Children (3 films), Catholic Relief Services (2 films), and Aid to the Church in need (2 films). The following NGOs produced one film each: World Watch Monitor, World Compassion, Open Doors, Muslim Aid, Japan Emergency NGO, Amel Association International, Swiss Church Aid, Samaritans Purse, and Handicap International.

Figure 2: Actors involved in the creation of VR films on the displacement of Syrians (2014-2019)



2.4 Four VR films on the displacement from the Syrian conflict: Selection criteria

For this thesis, I chose to analyse four films about Syrian displacement: *Project Syria* (2014), *Clouds Over Sidra* (2015), *Refugees* (2015), and *Sea Prayer* (2017). There are three main reasons for choosing the four films. First, I chose to focus on refugees from the Syrian conflict since the movement of people from Syria to Europe has shaped public discourse, grassroots movements, and state responses not just in Europe but in countries like the US. This was particularly the case since the 'European refugee crisis', which was also known as the 'Syrian refugee crisis' due to the large

number of Syrians seeking safety in Europe. Pro-Brexit party United Kingdom Independence Part used a picture depicting a line of people walking to Slovenia with the slogan, “Breaking point: the EU has failed us all” (Stewart and Mason, 2016). On the other hand, there were moments of outpouring of public sympathy and mobilisation in support of refugees, sparked by particular images of refugees such as the aforementioned photograph of Alan Kurdi’s body on the beach (see Chapter 6 for a more detailed discussion about the photograph of Kurdi and its reception) and of Omran Daqneesh.

In the mediatisation of refugees fleeing the Syrian conflict, Arab and Muslim refugees in particular, or those who are perceived as such, are increasingly associated with terrorism (Abbas, 2019). Events such as the Paris terrorist attacks in November 2015 and the New Year’s Eve incident in Cologne in December 2015 fuelled existing civilisational discourses about the “black and brown racialized masculinities” as backward and antithetical to the ‘progressive’ values in Europe (Rodríguez, 2018; Danewid, 2022). Selecting virtuous VR that all focus on those fleeing the Syrian conflict enabled me to contextualise the films within such broader historical and political context by drawing on existing literature and online data (such as news articles, reports, and interviews). All of the four films were made with intentions to make some kind of intervention into debates surrounding the displacement from the Syrian conflict, whether that be to raise awareness or funds. Although *Refugees* follows refugees from Syria, Afghanistan, and Iraq, it is a VR film produced by a VR company based in Europe (the Netherlands) with the intention to intervene in the debates sparked during the ‘European refugee crisis’. This focus also allowed me to draw out the racialised and gendered nature of humanity in more depth, as I discuss in the following chapters.

Secondly, among films about the displacement form the Syrian conflict, I wanted to choose films with commonalities and differences to shed light on how the idea of ‘humanity’ manifest in different but related ways. Table 1 shows how these films differ in format (e.g. documentary, computer-generated reconstruction, or animation), the type of organisations and companies involved in their creation (international organisations like the UN or the World Economic Forum, news agencies like *The Guardian*, or independent VR companies), the target audience (e.g. businesspeople, world leaders, or general public in the Global North), purpose of the film (e.g. explicit

focus on fundraising and/or awareness-raising or not), the format of the release (e.g. exclusive release or immediately made accessible to the public on platforms like YouTube or Steam), and the types of refugees' experiences depicted (e.g. life in camps or boat journey).

Table 1: Characteristics of *Project Syria*, *Refugees*, *Clouds Over Sidra*, and *Sea Prayer*

Film	Format	Actors involved	Actor category	Protagonists	Setting	Purpose	Target audience
Project Syria	Computer-generated reconstruction	Nonny de la Peña, the University of Southern California's Interactive Media Lab, Emblematic Group, and VR production company MxR Studio, commissioned by the World Economic Forum	Independent, Journalism, university, tech companies, World Economic Forum	Refugee children	Refugee camp	Awareness-raising	World leaders, then the general public
Refugees	Documentary	Dutch VR production company Scopic	Independent VR company	Refugees in general	Boat arrival	Awareness-raising	General public
Clouds Over Sidra	Documentary	United Nations Sustainable Development Goals Action Campaign, VR production company Vrse, UNICEF Jordan, Samsung	UN, tech company	Refugee children	Refugee camp	Donation and awareness-raising	World leaders, then the general public
Sea Prayer	Animation	*The Guardian*, UNHCR, Khaled Hosseini, Liz Edwards, French creative technology company SoWhen?	UN, journalism	Refugee father and child	Peaceful and wartime Syria	Awareness-raising	General public

More broadly, the four films serve as provocations to frame different aspects of virtuous VR and the concept of humanity, such as the political economy of VR (*Project Syria*), dis/embodiment and the relationship between refugees' humanity and infantilisation and innocence (*Clouds Over Sidra*), the role of immersive journalism and the feminisation of refugees' humanity (*Refugees*), and philanthro-capitalism and digital humanitarianism and the relationship between the figure of children, future, and humanity (*Sea Prayer*).

Project Syria was commissioned by the World Economic Forum and directed by journalist and documentary filmmaker Nonny de la Peña in a collaboration between the University of Southern California's Interactive Media Lab, Emblematic Group, and MxR Studio. As a piece of immersive journalism, the film weaves together computer-generated graphics with real life footage and recording, including reconstructing the Bustan alQasr neighbourhood of Aleppo based on a recording from November 2012, which was further verified with reference to eight other videos, and using an audio recording from a refugee camp on the border with Iraq (Malmo, 2014; Setrakian, 2014; de la Peña, 2015e). *Project Syria* was chosen for being the first VR film released on the topic of displacement from the Syrian conflict; Nonny de la Peña's significant role in the development of virtuous VR; and as a film that sparked WEF and its Executive Chairman Klaus Schwab's interest in VR technology. As I explore in Chapters 3 and 4, the WEF has become a noticeable organisation pushing for the metaverse. After screening the film to world leaders at Davos, it was eventually released on the gaming platform Stream[36] for free to reach a wider audience (Flatlandsmo and Gynnild, 2021). Since the film was created before the increase in investments into VR technology, the technical aspects of the experience, such as graphics, do not live up to the media attention in generated and is overall an underwhelming experience compared to the three other films. I therefore use the film to map out the connections between important players in the VR ecosystem, and to discuss the political economy behind its fixation to the idea of 'good'.

Clouds Over Sidra is a collaboration between the UN Sustainable Development Goals Action Campaign, VR production and distribution company Vrse (which later changed its name to Within, then was acquired by Meta in February 2023), UNICEF Jordan, and Samsung. The film was shot using Samsung Gear VR 360-degree platform, and was designed to be watched using Samsung Gear VR (Butcher, 2015). The film was chosen for being the highest profile and most discussed film out of the four films. This was due to being the UN's first-ever VR film, and as a film that played a central role in the further entrenchment of the framing of VR technology as 'good', including its

[36] This is the link to Project Syria on Steam:
https://store.steampowered.com/app/491790/Project_Syria/

association with empathy. Chris Milk, the director of *Clouds Over Sidra*, is a key player in the development of virtuous VR, who has gone on to create various VR films on other topics and whose company Within has recently been investing into its VR fitness service, Supernatural (Milk, 2020), and was acquired by Meta in 2023. He has also played a significant role in propagating techno-optimistic discourses about VR technology as "the ultimate empathy machine" in his TED talk with over 1.6 million views (Milk, 2015). This framing has gone on to influence the UN's framing of VR as inspiring "humanitarian empathy" (*Virtual Reality: Creating Humanitarian Empathy*, 2016) and able to raise funds more successfully than conventional methods.[37] In addition to the film being cited in UNHCR's article titled '7 videos guaranteed to change the way you see refugees' (Parater, 2015), director Arora and producer Milk have made several media appearances to discuss the transformative potential of VR (Arora, 2015, 2017, 2019; e.g. Milk and Arora, 2015; Gills, 2016; Voynar, 2016).

Both *Project Syria* and *Clouds Over Sidra* received much media coverage between 2015 and 2016 as they were released in the early days of commercial VR becoming available, which boosted their techno-utopian coverage (Arora, 2015; e.g. de la Peña, 2015e, 2015c, 2015a; Digital Cultures Research Centre, University of the West of England, 2015; Milk and Arora, 2015; Voynar, 2016; Arora, 2017, 2019). Both films were also supported by major organisations, such as WEF (*Project Syria*) and UNHCR (*Clouds Over Sidra*). In many ways, those two films on the displacement from the Syrian conflict marked the beginning of the emergence of virtuous VR on displacement. Moreover, those films were made to raise awareness and funds among the already powerful (world leaders and businesspeople). Given the success of such endeavours, *Clouds Over Sidra* was made more widely available on YouTube and in the Within app [38], and came to be used in street fundraising campaigns by the UN Children's Fund

[37] For instance, it was shown in VR format at a humanitarian pledging conference in March 2015, where it exceeded expectations and raised $3.8 billion, and used in street fundraising campaigns in Canada (Anderson, 2015). It has been incorporated into UNICEF's street fundraising efforts in 40 countries, with claims that VR is twice as effective in generating donations (UN Virtual Reality, n.d.).

[38] Chris Milk and Aaron Koblin established the company Within in 2014. The company created VR and AR products. Within was an application where people can access various immersive experiences using commercial headsets and smartphones. The app was shut down in February 2023 as Within shifted its focus on the VR fitness app Supernatural and was acquired by Meta (more on this in Chapter 4).

(UNICEF).

Refugees, was the VR film awarded the Best European Independent Experimental Film and the first VR film to be screened at this festival (Scopic, 2016). It was created by an Amsterdam-based VR studio Scopic. It is directed by Scopic's Chief Editor Eduardo Hernandez Perez and journalist Hans Jaap Melissen to whom Scopic reached out, as he is a well-known war journalist in the Netherlands (Melissen, 2016). According to Scopic's website, it is the first VR studio based in Amsterdam. *Refugees* was chosen for being the first hit on YouTube as a search result using key words 'syria' and 'refugee' in November 2019, when I began this research. As YouTube introduced support to upload 360º videos in March 2015 (Verma, 2015), *Refugees* would have been one of the most accessible VR films on Syrian displacement that people could access. I wanted to analyse a film that was created by an independent VR company, in contrast to the three other films that have the involvement of major organisations like the UN, WEF, Google, or *The Guardian*. Moreover, this film focuses on the arrival of refugees on the Greek island of Lesbos, rather than the overrepresented experience of living in refugee camps (*Project Syria* and *Clouds Over Sidra*). Described as "VR journalism" (2018) by Co-Founder of Scopic Yori van Gerven, *Refugees* also provides a more journalistic account that documents what is happening on the ground, in contrast to the three other films that are heavily scripted or narrative-driven. In sum, the film merits analysis as an independently made piece of 'VR journalism'[39] that has attracted a certain level of critical attention.

Finally, *Sea Prayer* was first released as an animation film on *The Guardian*, then subsequently published as an illustrated book in 2018. The film was written by novelist and Good Will Ambassador for the UNHCR Khaled Hosseini in response to the death of two-year-old Syrian-Kurdish child Alan Kurdi, sponsored by Google, created by *The Guardian*'s in-house VR team, UNHCR, VR artist Liz Edwards, and post-production studio SoWhen?, and narrated by actor Adeel Akhtar. The film was chosen for its coverage of a significant event in the 'European refugee crisis', the death of Alan Kurdi, which affected broader conversations about the treatment and plight of refugees

[39] In their systematic literature review, Bujić and Hamari (2020) found that widespread academic research on the topic of 'immersive journalism' (including 'VR journalism') began in 2017.

seeking safety in Europe. The actors involved are also different from the other films in that it is a collaboration between a news organisation (*The Guardian*) and a UN agency (UNHCR) with sponsorship from Google during the 'initial hype period' of immersive journalism in 2015-2016 (Kangasniemi, 2021). *Sea Prayer* is an animated, narrative-driven experience written by a bestselling novelist. Although both *Refugees* and *Sea Prayer* focus on boat journeys, the former follows the arrival of refugees on the shores of Europe while the latter tells the story of the events leading up to the departure from the shore. According to *The Guardian*, the film was the first narrative animated VR film created using Google Tilt Brush (The Guardian, 2017b), with which users could draw, paint, and sculpt in 3D in VR using the hand-held controllers. Google's funding may explain why this technology was used. Although Google has withdrawn from the VR market for now, officially abandoning its VR projects in 2019 and discontinuing its VR headset Daydream, *Sea Prayer* provides an interesting example of major technology companies attempting to enter the VR market through avenues like humanitarianism (the issue of displacement) and journalism (immersive journalism).

In sum, the four films all use VR in different ways and for different purposes. As examples of virtuous VR, each film sheds light on different aspects of the displacement from the Syrian conflict and draw on elements of the concept of humanity that I argue undergirds virtuous VR on displacement.

2.5 Multi-level analysis of VR films

Returning to the previous discussion on the importance of capturing the embodied aspect of VR films, this section discusses how I analysed the films. The embodied methodology I used for this project entailed watching and analysing the four VR films at three different levels: embodied experience as a participant in the virtual environment and a consumer of the technology, embodied experience outside of the virtual environment, and embodied experience as a researcher. Those multiple levels at which research takes place overlap and interact, informing the experience of watching VR films as well as the analysis itself. My thinking on embodied methodologies developed through the process of analysing VR films and by engaging with methods and methodologies that foreground embodiment. Such literature include: walking interview as a biographical method (O'Neill and Roberts, 2019), listening to

images (Campt, 2017), embodied analysis of film (Marks and Polan, 2000; Sobchack, 2004), creative and participatory methods such as collage-making and digital storytelling (Vacchelli, 2018), autoethnography (Strom, 2021), sensory ethnographic research (Pink, 2015), and how to practise embodiment in the research process (Ellingson, 2017).[40]

In practical terms, I watched *Clouds Over Sidra*, *Refugees*, and *Sea Prayer* using the YouTube application on the Oculus Quest 2 headset. Since *Project Syria* is only available on the digital gaming platform Steam, the headset needs to be connected to a computer. I therefore downloaded Steam, bought a cable to connect Oculus Quest 2 to a Windows desktop computer, connected Steam VR (software that enables users to watch and play VR content on Steam using VR headsets) with the headset, and watched it on Oculus Quest while it was connected to the computer. The process of analysis involved putting on the Oculus Quest 2 headset made by Meta, watching the films as many times as required while paying attention to the three different levels, taking notes on my laptop (which I had on my lap if I was sitting on a chair or on the floor if I was sitting on the floor), and then coding my notes to look for emerging themes.

The process of note-taking incorporated elements of fieldnote-taking and autoethnography: writing down what is going on in each scene as well as what I saw, heard, felt, my own movements and how I was expected to move, how my body reacted to the headset and the virtual experience (e.g. weight of the headset and nausea), as well as how I related to the scenes, people, and objects in the film while taking into account the larger context in which I and the films exist. In the end, I had 40-pages worth of notes to analyse (i.e. roughly 10 pages for each film). My notes were stored on my password-protected OneDrive cloud storage using my university account. Upon my first viewing of each film, I noted down what came to my mind without trying to think too deeply about it in the moment. Since repeated watching was

[40] She presents a list of practices for embodying research and how to incorporate embodiment when taking fieldnotes. I found the latter particularly helpful when taking my own notes: engaging your whole body as you write since writing is a corporeal activity not simply a cognitive one; understanding language as dynamic and open-ended; and using imaginative figurative language like similes, metaphors, hyperbole, and poetic language to express sensory perceptions.

likely to increase my critical outlook on the film, this was important to ensure that I wrote down my reactions as naturally as they emerged. After that, I watched the films with different purposes in mind. For example, I watched it to focus on the sound by closing my eyes; on the narrative (the speaker); on what is being depicted (e.g. turning the sound off to focus on the visuals). I sometimes went against the expected gaze of the film, for example not looking at Sidra when she was speaking to the camera, to understand what was going on elsewhere. When analysing my notes, I attended to the experience as a whole and its contextualisation rather than just the immediate surroundings. In other words, I acknowledged my pre-existing knowledge on the displacement from the Syrian conflict, drew on other materials such as news articles and literature to make sense of what was being depicted and communicated through the films, and recognised how my positionality influenced what I notice and deem important (more on positionality below). In order to inform this multi-level analysis, such as the wider context in which the films were made and the places and people the films represent, I used publicly available materials about the films, the creators, the Syrian conflict, and the displacement.

Figure 3: The author watching *Project Syria* using Oculus Quest 2



The process of coding my notes involved identifying themes related to the three research questions: 1) what conceptualisations of ‘humanity’ undergird VR films on

displacement, 2) how do they manifest through VR films, and 3) what are the implications of such conceptualisations of humanity? More specifically, this involved identifying themes related to the concept of humanity in relation to displacement and refugees. This was done through iterative analysis, going back and forth between their readings of the data and existing explanations and theories (Tracy, 2013, p. 184). Based on my reading around the concept of humanity, refuges, and displacement, and existing studies on VR films on displacement, I assigned importance to emergent themes. Given that existing studies discuss the association of figures of refugees with specific understandings of humanity (Introduction), I focused on the relationship between the dominant representation of displacement and dominant figures of refugees in each film. For example, it was clear when I watched the four films that *Project Syria*, *Clouds Over Sidra,* and *Sea Prayer* all focused on children. I then delved deeper into what this meant by reading around and analysing it in terms of the association between childhood and innocence (Chapter 4), depictions of ordinary life in a refugee camp (Chapter 4), and the association between the figure of children and future (Chapter 6). In addition, I also considered how the concept of humanity works through the VR technology itself by thinking about how it attempts to remake the refugee-user relationship and how people come to know displacement (i.e. technological disembodiment in Chapter 4 and experiential dissonance in Chapter 5).

Figure 4: A picture of Oculus Quest 2



In terms of the VR headset, I had planned on borrowing one from the University of

East Anglia's Media Suite, but was unable to access it as the university had stopped lending any equipment as a safety measure due to COVID-19. Using my research fund, I purchased Meta's headset Oculus Quest 2 in October 2020. I bought it for £399.99 at the time, and the price seems to have stayed around the same (as of January 2023). The price of the headset made me wonder just who is able to access supposedly 'commercial' VR headsets. The headset has a band that you adjust so that it does not fall off or shift while watching something or playing a game. At first it was difficult to adjust it properly, and it kept slipping forward and I could feel the headset pulling the skin on my face. The headset comes with two hand controllers, which are used as a cursor to navigate the virtual environment. Since the four films are 360° films, there are no effects that can be felt in the hand controllers, though for some games and experiences they vibrate to add a haptic dimension to the overall experience. The headset itself weighs about 500 grams. When I put on the headset for the first time, I could immediately feel the weight of it on my head and shoulders. For this reason, although all the films are short at under 9 minutes, I had to take off the headset after about 15 minutes as my neck and shoulders started to ache.

Another physical reaction I had to the headset was nausea. It was particularly bad for *Refugees*, which was likely because of the fast movement of the camera. There is a scene in the film where the camera is placed on top of a car, and it is driving up a hill beside refugees walking. This was a scene that caused nausea the most. The more I watched the VR films, the less nausea I felt, though it never completely went away. In the beginning, the nausea and dizziness lingered and I could not do any more research using the headset for the day. These symptoms of nausea and dizziness are part of what is known as 'VR sickness' or 'cybersickness' (McCauley and Sharkey, 1992). Although there are different theories as to the precise reasons for VR sickness, it is generally thought to occur when there is a mismatch between the information various sensory organs (such as vestibular[41], visual, and proprioceptive[42] senses) receive (Patrão, Pedro and Menezes, 2015; Chang, Kim and Yoo, 2020; Caserman *et al.*,

[41] Associated with the inner ear, the vestibular sense concerns the body's balance and spatial orientation.

[42] Proprioception concerns a person's own awareness of their body, for example its location, movement, and parts of the body.

2021). Research demonstrates that a variety of factors related to the way in which the user experiences VR, such as the differences between Cave Automatic Virtual Environment (CAVE)[43] or a head-mounted display like Oculus Quest 2), the content of the VR experience (such as the time lag between when the user turns their head and when the virtual scenery moves, length of the VR experience, and the ability of users to move their actual and virtual bodies), and user characteristics (such as previous VR experience, susceptibility to motion sickness, and gender) contribute to it (Chang, Kim and Yoo, 2020). My experience of nausea and dizziness is likely to have been exacerbated by the fact that I am prone to motion sickness in general, as susceptibility to motion sickness is an important predictor of the likelihood of someone experiencing VR sickness (Chang, Kim and Yoo, 2020, p. 1671).

2.6 Conjunctural analysis

According to Nakamura (2020) who coined the term 'virtuous VR', this particular genre of VR technology emerged in the aftermath of Facebook's acquisition of Oculus VR in 2014. Compared with the 1990s when VR was being developed but could not reach its potential as the technology was not yet adequately in line with the visions of enthusiasts, the 2010s saw an increasing commercialisation of the technology with Facebook's entry into the VR market. The most important characteristic of this new phase of VR technology, according to Nakamura (2020), is not the hardware or content but the cultural meanings attached to it as 'good' technology. This is the framing of VR technology as technology for 'social good', which has been prominent particularly in relation to virtuous VR on displacement through its description as an 'empathy machine' and 'empathy generator' (de la Peña, 2015c; Milk, 2015). This framing provides a "cultural alibi" for major technology companies that have been involved in mass-scale surveillance, exploitation of workers in the Global South, and amplification of right-wing racism and sexism (Nakamura, 2020, p. 48). This project uses the

[43] CAVE provides a room-sized VR experience, where 3D graphics are projected onto the walls. This setup can be experienced by multiple people at the same time. Each person would wear a head-mounted display or glasses that can be used to display stereoscopic 3D images. CAVE provides an even more immersive experience than commercial headsets because the entire room can offer full-body tracking of the user(s) that is then reflected onto the VR experience. Users can also use handheld controllers to interact with the virtual environment.

approach of conjunctural analysis to examine virtuous VR on the displacement from the Syrian conflict to extend Nakamura's (2020) analysis. I bring together economic, political, and social changes in the areas of humanitarianism, migration, and neoliberal capitalism to identify the conjuncture in which virtuous VR emerged. Since the next chapter (Section 3.8) provides more detail about the current conjuncture, this section provides an overview of what conjunctural analysis is.

Hall et al.'s (2013) work on 'mugging' is a well-known example of conjunctural analysis. They analysed the phenomenon of 'mugging' as a window into the crisis of hegemony of the British state. Similarly, an analysis of virtuous VR on displacement provides an avenue to examine the power dynamics of the current conjuncture comprised of a variety of historical and political forces. Conjunctural analysis involves mapping power relations in a given social field to elucidate the interactions between them (Gilbert, 2019, p. 6). It identifies "moments of relative stability and those of intensifying struggles and unrest" (Hall *et al.*, 2013, xv) as a basis of historical periodisation, locating a particular phenomenon within wider historical moments and shifts (Grayson and Little, 2017). In this approach, virtuous VR is not merely a text to be decoded. It provides a window into the current conjuncture shaped by the constellation of power involving technology companies, the military, nation-states, and international organisations like the UN and the World Economic Forum, journalists and news organisations, and NGOs.

As mentioned in the Introduction, an analysis of virtuous VR on displacement illuminates the connections between various forces within the shifting hegemony of neoliberal capitalism: changes in the nature of humanitarian communication (from the 1970s) with the emergence of pots-humanitarianism after the end of the Cold War (Chouliaraki, 2013); the growth in the number of NGOs and project-based funding leading to an increasingly marketised and competitive humanitarian sector (Cooley and Ron, 2002; Chouliaraki, 2013) (from the 1990s); development of digital technologies (from the 1990s) and their adoption by humanitarian agencies to market their 'brands', facilitate 'audience engagement', and achieve efficiency and quantification (Chouliaraki, 2013; Burns, 2019b) in what is commonly called digital humanitarianism (since the 2010s) (Meier, 2011); production of the myth of difference (Chimni, 1998) and increasing securitisation of movement of specific people (in the

1990s after the end of the Cold War); emergence of philanthro-capitalism (around the 2000s) (Burns, 2019a), and the Syrian revolution and the country's subsequent descent into war and displacement, which at the time was a uniquely mediatised event (Al-Ghazzi, 2014) (from early 2010s with an increase in media attention during the 'European refugee crisis'). The process of mapping these social relations involved identifying major historical turning points in the domains of neoliberal capitalism, humanitarianism, migration, and the development of digital technologies. I provide a more detailed analysis of each of those developments in Chapter 3, but it is worth noting here that the end of the Cold War initiated many of these changes. In the realm of migration, one significant change relevant to this thesis is what Chimni calls the 'myth of difference', which I refer to throughout the following chapters. With the end of the Cold War, the strategic significance of accepting refugees ended for states in 'the West'. Consequently, a myth that there is a fundamental difference between refugees within Europe and refugees from the Global South was created to justify a policy of containment. For example, this myth suggested that displacement in the Global South were due to endogenous factors (not global capitalist expansion or imperialism) and that refugees from the Global South were 'economic migrants' rather than 'political refugees' (as refugees within Europe or those fleeing the Soviet bloc were) (Chimni, 1998).

In a way, this is a project that 'studies up': one that studies the "culture of power rather than the culture of the powerless" (Nader, 1972, p. 5) through the analyses of VR films produced by actors in the US and Europe, including journalists, technology companies, UN agencies, VR production companies, and WEF. Those actors are part of the humanitarian imaginary, a communicative structure that represents the Global South to the Global North and communicate the imperative to act (Chouliaraki, 2013, p. 138). Virtuous VR on displacement is therefore an important site of analysis because it is one arena where power manifests and is reproduced to uphold global power structures. I make the case in the following chapters that the mobilisation of a generic, universal humanity obscures global power relations that police certain people's movement, and ultimately reproduces the modern/colonial Man. Nader's (1972, p.1) words that "never before have so few, by their actions and inactions, had the power of life and death over so many members of the species" is pertinent to the life chances denied to migrants and refugees by actors in the Global North, whether that be because of

poverty rooted in colonial plunder, externalisation of borders, detention and deportation, or the slow violence of the everyday once refugees reach 'safety' (Mayblin, Wake and Kazemi, 2019; Walia, 2021).

2.7 Situating myself in this research

The question of positionality and ethics is particularly pertinent to research on displacement, migration, and mobility. Discussions around the 'double imperative' (Jacobsen and Landau, 2003) in refugee research is ever-relevant: the idea that research about displacement and with refugees not only needs to be academically sound but also policy-relevant so that researchers are contributing to the betterment of refugees' lives and not exploiting their lives for academic and personal gain. As my research does not contribute to improvements in the lives of refugees in any direct way, the thought has always lingered: What, then, is the point of this thesis?

This section provides a short reflection on how I position myself in relation to this research. It is the culmination of grappling with questions of ethics, the extractive nature of research (Tuhiwai Smith, 2021; Ba, 2022) and my complicity, feelings of discomfort, and an understanding of self as situated, multiple, and changing. Writing about positionality is not about 'declaring' my 'identities' or privileges (Kalinga, 2021)[44]. Instead, writing about positionality concerns how this thesis shaped and is shaped by multifaceted selves embedded in the social world. Oka (2019), in her book on 'Third World feminism', offers a corrective to the oft-mistaken understanding of positionality as a question of identity or 'who I am'. Rather, positionality is spatial, and as such it is a concept that dislocates the idea of a homogenous, stable identity (Oka, 2019, p.189). She makes two further points: first, one's position allows one to see or not see certain things, and second, the position of the speaker—in this case the researcher—cannot be known in advance of the act of speaking. It is in the process of speaking in relation to others that my positionality and what it allows me to see or obscures from view come to light. With those important points in mind, I firstly discuss how I understand

[44] Kalinga's tweet reads: "People are really fumbling w/ postitionalify [sic: positionality] statements. someone will make a declaration of "privilege" immediately before committing epistemic injustices. The positionality statement is not "a pass" to continue harm. It's a [sic] awareness declaration on [sic] its influence on the work."

my relationship with refugees and people who do not have the same freedom as me to move around the world, and how my positionality as a critical scholar affected the research process. I write this with a commitment to embracing the openness and uncertainty that accompanies speaking from one's positionality.

I recall a conversation with a friend where I shared the issues I have always have grappled with: that my research is meaningless (it does not make any direct or material contributions to improving the lives of refugees (Turton, 1996, p. 96), indulgent (thinking and writing in the safety of a home and university at the imperial core, when there is so much violence in the world, feels like a frivolous endeavour), and intrusive (I talk *about* refugees without their involvement, as has been pointed out by many refugees, activists, and scholars). On the latter point, for instance, amidst burgeoning projects on Syria since the uprising in 2011, Syrian academic Ammar Azzouz asks: 'Can the Syrians speak?' Questioning the ways in which academics based in the Global North make careers out of research about Syria, he writes, "Many of these projects…have been led by academics who knew little about our pain; we, who lived the horrors of war, and who still live the trauma of forced displacement, destruction, and exile. But our pain, our suffering, was a fundable project" (Azzouz, 2021). He concludes the piece resolutely, "Our pain is not a funding project".

My friend's response to these thoughts was that because I am a 'migrant' myself, I have a degree of understanding of what refugees go through. This is perhaps not untrue, but I felt discomfort swirling in my stomach. I realised that it was because their comment touched upon the very issue that led me to start this project. How to hold and think across different experiences, our embodied lives, without falling into the dichotomy of sameness/difference? How to practise humanisms that are not the overrepresentation of Man, as Sylvia Wynter puts it? How to build a world where we can be human in multiple ways, without pandering to the white, cisgender, bourgeois, patriarchal, colonial gaze?

One of the starting points for this thesis, as I outlined in the Introduction, is that the dichotomy between refugees who must be assisted on humanitarian grounds and migrants who move for economic reasons often creates a hierarchy of deservingness that serves state interests and works against the freedom of movement for all.

However, in asserting that refugees are migrants (i.e. they move), I do not mean to suggest that all movements are equivalent or that the differences do not matter. What I am interested in is not the categories themselves but the political processes through which categories are (re)produced, put to use, taken up, and resisted. Clearly, there are people who can move with much more ease than others, whose presence in a new community is more readily embraced, who bring 'benefits' in the eyes of the nation-state and the powerful. In this sense, the relationship that I have come to understand having with displaced people around the world is one of being implicated in a global system that facilitates the mobility of people like me, while barring the mobility of certain others even to the point of death (Mbembe, 2003). This relationship is not coincidental or a glitch in the system (Walia, 2021). My ability to move relatively freely, as someone with access to various forms of capital, who have learnt the lingua franca of academia (English) and speaks it with 'no accent' as I was once told, who has Japanese citizenship—born into it by luck (Shachar, 2009)—who has gone through the higher education system, who is often seen as a 'good migrant'[45] are because of the same global system that generates displacement. I can move freely because of the existing global system that operates on a racialised, colonial logic based on a hierarchy of humanity.

The fact that I happen to be a 'migrant' in some context does not *necessarily* lead to better understanding of the struggles of refugees, but it has provided with me with conditions that enabled me to question, analyse, and better understand the injustices of the global system of im/mobility. Taking cue from scholars of standpoint epistemology and feminist scholars who foreground the importance of reflecting on the structures of power in which one is implicated (Collins, 1991; Mohanty, 2003; Moreton-Robinson, 2013; Oka, 2019), I have thought about the different positions I occupy in this world, which shifts depending on where I am and who I am with. Relational thinking, as opposed to comparative thinking, is helpful in cultivating such an understanding of my positionality. As Weheliye (2014) explains, speaking about the need to discuss the transatlantic slave trade, genocide of Indigenous people in the Americas, Asian American indentured servitude, and Latino immigration to the US: "…we cannot do so

[45] All of these things can and do coexist with the fact that I experience racist and gendered violence in the UK.

[think about their relationships] in the grammar of comparison, since this will merely reaffirm Man's existent hierarchies rather than design novel assemblages of relation" (p.13). And, as Lentin (2020) argues with regard to race, comparisons assume that there are discrete units of analysis that can be compared, which obscures the ways in which the boundaries of units of analysis exist as a result of historical and political boundary-making processes in the first place. For those reasons, it is necessary to attend to what Yao (2021) calls "geographic locatedness" when thinking about positionality so that, for example, East Asian diasporic presence is not simply transplanted from the US context to the UK context.

As mentioned in the Introduction, this project was ultimately borne of the despair I felt at the realisation as a teenager, and as I moved through and saw more of this world, that we are *not* all human, at least not in the same way. Writing this thesis has been a way for me to deepen my understanding about how I am—as everyone else—part of a system based on a differential distribution of humanity according to a colonial logic, and how technologies like virtuous VR provides cover for such a system. In this sense, this project is about the constellation of power in the Global North producing VR films about displacement that feed into the construction of the humanitarian imaginary (Chouliaraki, 2013)—the very image I saw on the screen as a teenager that eventually led me to pursue a PhD.

I also want to note here—particularly as I use decolonial theory in this thesis—that colonialism is not an exclusively European phenomenon, although that is often the focus where I am, in the UK context. Colonialism is also not in the past; it is not a historical event. It is still with us, it is quotidian (Carby, 2019). While I am not in currently in Japan, I carry around my 'implication' [46] (Morris-Suzuki, 2005) in Japanese colonialism and its legacies—I continue to reflect on and refuse easy assimilation into and finding comfort in homogenising racial categories that erase the nuances of

[46] I adopt Morris-Suzuki's conceptualisation of being 'implicated in the past', which she distinguishes from 'historical responsibility'. Implication highlights that even if one does not bear direct responsibility for acts of violence and dispossession, they may benefit from the results of these acts, living in a present that are built on them: "Though we may not be responsible for such acts of aggression in the sense of having caused them, we are 'implicated' in them, in the sense that *they* caused *us*" (Morris-Suzuki, 2005, p. 27).

differential humanity tied to various colonial histories. Japan has its own colonial and imperialist history, which manifest in contemporary society in the form of violence against Ainu and Ryukyuan people, detention of migrants, exploitation of migrant labour under the guise of 'technical trainee schemes' (many of whom are from Southeast Asia), racism against Korean and Chinese people living in Japan, and the acute disposability with which certain people are treated in Japan. My positionality, experiences, and thinking are weaved into this thesis, even when they are not made explicit.

In addition my relationship to migration and displacement, my positionality as a critical scholar also affected the research process. Since the multi-level analysis incorporates reflections of my own experiences of the VR films, I acknowledge that my initial (and subsequently continuing) scepticism towards techno-utopian claims about VR technology and displacement provided particular orientations to my experiences, interpretations, and analyses of the films. Although I attempted to experience the films with an open mind especially at the beginning by not doing much critical reading around the films, the scepticism with which I entered those experiences most likely directed my attention to elements of the experience that resonated with critical outlook. However, because the process of analyses was an iterative process whereby I went back and forth between reading my notes and literature, coding, amending the codes, and analysis, this provided the time and space required to be critical of my own reflections and interpretations, and to add nuance to my analysis. On the other hand, my academic background in critical migration and refugee studies provided me with the resources to identify certain aspects of the films (such as the long-standing relationship between refugeehood, innocence, and humanity) that became central parts of my analysis.

2.8 Limitations of this research

In terms of the films selected, I see two main limitations. Firstly, I restricted my search to VR films on displacement from the Syrian conflict so that my analysis could be better contextualised. This meant that other films that may have offered different analyses or angles were excluded. Future studies can focus on other contexts and/or include a wider search and analyses on virtuous VR on displacement, which may shed further

light on the relationships between VR films on displacement from different contexts. Secondly, I wrote in Section 2.3 that NGOs produced 33% of the VR films on displacement from the Syrian conflict. Despite this, none of the four films analysed in this thesis were produced by NGOs. As I explained earlier, I chose four films that I believe serve as provocations to highlight different aspects of virtuous VR and the concept of humanity. I started the selection process by identifying the most high-profile films such as *Project Syria* and *Clouds Over Sidra*, then looked for other films that shed light on different aspects of virtuous VR on displacement. As Gruenewald and Witteborn (2020) did by analysing films produced by UNVR, there is a benefit to focusing on virtuous VR films on displacement produced by specific actors such as NGOs. Such studies will make important contributions to the literature on the different actors involved in the production of virtuous VR, the political economy of humanitarianism and VR technology, and how they impact the production of virtuous VR on displacement.

With regard to embodied methodology, I proposed the multi-level analysis to make more explicit how to go about analysing VR films that work on various senses and at multiple levels. While there are some similarities with autoethnography as they both connect reflections on the person with the broader cultural, social, historical, and political dynamics, I sought to make my methodology more specific to the analysis of VR films. One limitation of this embodied methodology may be that it is highly subjective given its reliance on the personal experiences and reflections of the individual researcher, thus not replicable or generalisable. However, an embodied approach is suited to the analysis of VR films because they are a medium that relies on embodiment. Moreover, as Ellingson (2017) writes, a focus on embodiment breaks down the subjective/objective dichotomy, which was an important part of my methodology and analysis as I discussed in Section 2.1.

3. *Project Syria* (2014): Political economy of VR technology

3.1 Watching *Project Syria* in 2022

When the film loads on the gaming platform Steam, I am prompted to press a key to start. As the film begins, I am standing on a street in Aleppo—what looks like a residential block—bustling with people, market stall owners chatting to passers-by. The CGI reconstruction of the scene provides me the sense that I am in a game-like world, not a 'real place', but the audio recording breathes life into the scene. In front of me is a girl singing in the middle of the street, with a few people listening in. Suddenly, there is an explosion. Everyone scatters. There is shouting, smoke, debris in the air. I hear a high-pitched noise as if my ears are ringing. I look around and notice that there is a boy lying behind me and a man tending to him. I hear the man crying out for help. At the end of this scene, the narrator (a deep voice with an American accent) says: "A third of all Syrians have been displaced by war. Reports indicate children have been specifically targeted in the violence."

Figure 5: A girl singing, *Project Syria*



The scene moves quickly onto the next one, set in a food distribution tent. I am at the back amongst the foodstuff, watching the person at the front talking to refugees who came to receive food. The people in the queue sound frustrated, and so does the person at the front of the stall. They seem frustrated, and I hear some shouting. The

narrator explains what is behind this scene: “Food supplies for Syrians seeking shelter in refugee and makeshift camps have become severely restrained.”

Figure 6: Food distribution tent, *Project Syria*



In the final scene, I am standing in a refugee camp. I see rows of white tents with UNHCR and Red Cross logos, and bin bags, wooden boxes, and rocks around the camp. The scenery feels empty. I start to hear and see a group of children to my right, warming themselves up by a fire. I hear dogs barking and children chattering. Then, I start to see ghostly figures—almost like cookie cut outs—of children all around me, increasing row by row. The number of tents also start to increase. As the ghostly figures increase, the narrator says: “There are now over a million refugee children. And the number of refugees has been growing exponentially.” The film then ends rather abruptly, leaving me slightly confused. Lasting about three minutes, I felt everything moved so quickly that I did not have time to process what was happening.

Figure 7: Figures of children multiplying in a camp, *Project Syria*



Project Syria focuses on child refugees from the Syrian conflict based on reports of children being specifically targeted and their increasing displacement. The film arguably focuses on children not just because of those reasons but arguably because of its prominence in humanitarian communication. For example, the final scene in a refugee camp where ghostly figures of children increase row by row not only reflects the narration about the growth in the number of displaced children. It is also an attempt to mobilise the figure of children and their futures being lost to conflict and displacement. The fact that they decided to use cookie cut-out-like figures may have been due to lack of funds, but it conjures up the figure of the universal child discussed in Chapter 4 (*Clouds Over Sidra*), and the loss of a generic future examined in Chapter 6 (*Sea Prayer*). The ghostly figures mask any individuality or the specificity of children from Syria, and instead produces a generic figure of children whose futures are being lost.

In the film, the sense of immersion mainly comes not from the graphics, the music, or the storytelling but from the audio recordings from real life events used throughout the film. Compared with the three other films, it is clear that *Project Syria* is a piece of immersive journalism as discussed below; it first and foremost communicates the basic facts regarding children displaced from the Syrian conflict, though they also carry a certain level of emotionality especially since the film shows a bomb exploding as a girl is singling, a boy being hurt, and people struggling to survive. Nevertheless, given

the advancements in VR technology since 2014 when *Project Syria* was made, there is a discrepancy between the media hype surrounding the film back then, and how it is to watch the film in the 2020s. Although the audio recordings work well in creating a sense of presence, the CGI reconstruction of the people and the surroundings appear angular and unrealistic, disrupting the sense of presence. While it is true that VR films need not necessarily aim for realism (de la Peña, 2015a), CGI reconstruction combined with real life audio recordings create a fragmented sense of presence and immersion compared to the documentary-style *Clouds Over Sidra* and *Refugees* and animated *Sea Prayer*. In fact, the director de la Peña herself acknowledges that the quality of the digital rendering is relatively poor due to lack of funds, though she still emphasises the emotional impact that the film has had on the audience (de la Peña, 2018, p. 207).

While *Project Syria* may not live up to the media attention it has received given the technological advancements since 2014, it has had a significant impact on the development of virtuous VR. Most importantly, the relationship between empathy and VR technology that de la Peña started to establish has been a major driver of the full-fledged emergence of VR 'for good'. The film is therefore more significant for what it tells me about the political economy of VR technology. For this reason, this chapter uses *Project Syria* and its creator Nonny de la Peña as a starting point to discuss the political economy of VR technology and the emergence of virtuous VR.

3.2 Introduction

Nonny de la Peña is the CEO of VR/AR/XR production studio Emblematic, founding director of Arizona State University's Narrative and Emerging Media programme since 2021, and a journalist who worked on documentary films before venturing into the VR sphere (de la Peña, 2019). While the uses of VR technology in journalism have become more accepted, when she released her first VR documentary *Hunger in LA* in 2012, she faced cold shoulders and criticism particularly from journalists who questioned if immersive journalism could ever be ethical or objective by traditional journalistic standards. Because of the lack of interest in VR technology, she even had to pay $700 out of pocket to fund *Hunger in LA* (de la Peña, 2015d). Since then, she has come to be known as the "Godmother of Virtual Reality" (de la Peña, 2015c) as

the leading figure in immersive journalism.

Project Syria was the first VR film about the displacement from the Syrian conflict, and de la Peña's attempt at realising immersive journalism. In 2007, she co-created *Gone Gitmo* with Peggy Weil, a recreation of Guantánamo Bay prison camp initially released on the online multimedia platform Second Life and then as a first-person experience in Unity3D in 2013 (MIT Open Documentary Lab and MIT Comparative Media Studies/Writing, no date). This began her journey into "using virtual environments to tell journalism stories…[and] thinking about putting people inside the story and thinking about body-ness, and what it means to have an embodied experience of a news story": an approach to journalism that she later came to name 'immersive journalism' (de la Peña, 2019). In 2010, she co-authored the article 'Immersive Journalism: Immersive Virtual Reality for the First-Person Experience of News' (de la Peña *et al.*, 2010), where the concept of 'immersive journalism' is defined as "the production of news in a form in which people can gain first-person experiences of the events or situation described in news stories" (p.291). More recently, she has described it as "a novel way to utilise virtual reality gaming platforms and digital technologies to put people in the middle of stories, to make them feel like they are present on scene", which enables people to "get a deeper, more visceral connection to the story...[which] allows them sometimes to have a better understanding of what's happening in their world" (de la Peña, 2015e).

Although the figure of children features prominently in the film, this chapter uses *Project Syria* as symbolic of the current conjuncture and the political economy of virtuous VR on displacement. Since Chapters 4 and 6 delve deeper into the relationship between the concept of humanity and childhood, and given *Project Syria* was the first virtuous VR film on displacement from the Syrian conflict, I believe it is more productive to use the film to discusses the political economy of VR films on displacement—the major actors involved and the financial stakes—to situate the emergence and virtuous VR in the wider socio-political and economic context. I link those discussions to deconstruct what 'good' means in 'VR for good': good for what and good for whom? Based on the approach of conjunctural analysis, I use Littler's (2016) questions as a guide for this chapter: "What is specific about the moment we inhabit? What common-sense understandings, what economic decisions, power

dynamics, what vested interests and collaborative terrains work to shape its contours? What does this constellation of forces look like? How are these power configurations different from before?" (pp.3-4).

I begin the chapter with de la Peña's framing of VR technology as "a visceral empathy generator" in an interview in January 2015 (de la Peña, 2015c), before creator of *Clouds Over Sidra* (Chapter 4) Chris Milk popularised the term "the ultimate empathy machine" (Milk, 2015). Based on de la Peña's discussions of immersive journalism, I present her view on the power of VR technology to elicit emotional responses and a unique connection to the news story due to technological affordances. She believes that the first-person perspective in VR generates empathy and a better understanding of the topic at hand. I use Foxman et al.'s (2021) analysis of the relationship between empathy and 'prosocial change' in VR as well as Rose's (2018) discussion of ethical risks of VR documentaries to point out the dangers of taking the relationship between VR and empathy for granted.

Section 3.4 provides a visual guide to the network of key figures in the VR world that de la Peña and her work inspired, including Palmer Luckey whose company Oculus VR was acquired by Meta in 2014, Founder and Executive Chairman of the World Economic Forum Klaus Schwab, and director of *Clouds Over Sidra* Chris Milk. I then delve deeper into the expansion of the VR, Augmented Reality (AR), and Mixed Reality[47] (XR) markets. While there have been talks of the 'failure' of the metaverse, it is still being pushed as the next big technological development by organisations like WEF (Chow, 2023; Schwab, 2023). The section therefore highlights the need to situate virtuous VR within the economic interests behind such a push.

Section 3.5 builds on this discussion to outline the uses of virtuous VR in the realm of humanitarianism and journalism. An increasing number of NGOs, VR production companies, technology companies, and news agencies have been investing in

[47] VR is a virtual environment with which one can interact. Augmented reality is when virtual objects are superimposed over the real world, therefore augmenting the experiences in the real world. Mixed reality is a combination of VR and AR, where the participant is able to go back and forth between the real world and the virtual world, simultaneously interacting with digital and physical objects.

virtuous VR. Given the economic incentives, this section provides an overview of 'VR for good' initiatives by the UN and NGOs in collaboration with corporations as an example of the marriage between digital humanitarianism and philanthro-capitalism (Burns, 2019b). Immersive journalism is another sphere where the interests of technology corporations and news agencies converge, and I analyse this in more depth in Chapter 5 (*Refugees*) and Chapter 6 (*Sea Prayer*). At the end, I raise the question of what exactly VR 'for good' is good for, with which I engage in the next sections.

The next two sections discuss what is obscured by this framing of VR as 'good'. Section 3.6 focuses on the entanglement between VR technology, the military, and the border-industrial complex whose interests have come to converge around the policing, securitisation, and militarisation of borders and migration. Given the deep implication of VR technology in those industries and the military which contributes to displacement through imperial warfare, I conclude that what virtuous VR is 'good' for is those actors who benefit from the border-industrial complex and warfare. In Section 3.7, I argue that contemporary capitalism can be characterised as modern/colonial, using the examples of extraction of data and raw materials and environmental destruction, labour exploitation, and coloniality of knowledge. I pay attention not just to the extraction of data and labour practices of technology companies but also the extractive and destructive industrial processes and their uneven effects along racial and gendered lines upon which digital technologies depend.

The concluding section brings those discussions together to identify the contours of the current conjuncture. I argue that the emergence of virtuous VR in the current conjuncture is a response to the crisis of neoliberal capitalism that began with the financial crisis in 2007/2008, and to the subsequent manufactured migration/refugee 'crises' most notably in the UK and the US. Virtuous VR enables actors involved in the very construction and maintenance of the modern/colonial world to claim to 'do good' while using VR technology to further entrench modern/colonial dynamics. The mobilisation of a generic, universal humanity is crucial here, as it positions actors and users in the Global North as an "innocent bystander" (Danewid, 2017, p. 1680) to border violence and deaths of refugees, which provides a façade that they are doing something 'good' but without fundamentally challenging the modern/colonial world or

modern/colonial Man.

3.3 VR and empathy: De la Peña's "visceral empathy generator"

Various media outlets covered *Project Syria* in the mid-2010s, describing its power in evoking highly emotional responses in the users, fostering empathy, and creating new possibilities for journalism (de la Peña, 2015e, 2015d, 2015a, 2015c). As mentioned in the Introduction, empathy plays a key role in the framing of VR technology as 'virtuous' (Nakamura, 2020), and de la Peña has played a crucial role in this development.

As mentioned earlier, *Project Syria* shares some similarities with the three other films analysed in this thesis in that it relies on the figure of refugee children like *Clouds Over Sidra* and *Sea Prayer*. What is most salient about *Project Syria*, however, is that it attempts to provide a platform for the users to witness the consequences of the Syrian conflict and displacement by allowing users to 'be there', and in turn for this to generate a deeper sense of understanding and empathy. De la Peña has suggested that witnessing in VR films offers the user a deeper understanding of an issue because they experience and can imagine themselves as 'others': "It's difficult to imagine, too, why people become refugees, but standing in the street like you are as a user when you watch *Project Syria*; when you experience close to the kind of onslaught they've been exposed to there, you go 'Oh, this could happen to me, too'" (de la Peña, 2019).

As Chouliaraki (2013, p.140) writes, witnessing in the journalistic context has a dual requirement: "the act of seeing as a proof of the facts on suffering (the objective dimension of witnessing) and to seeing as an emotive testimony to the 'unspeakable' horror of suffering (the reflexive dimension of witnessing)". In contrast to advocacy or fundraising campaigns, journalistic VR pieces need to be grounded in facts and at the same time communicate the emotionality of the situation. This requirement is reflected in *Project* Syria, in terms of the in-depth research, verification, and reconstruction that went into it (de la Peña, 2015e). The film can thus be understood as a VR film that positions the user as a witness, as de la Peña talks of here:

> Immersive journalism is a novel way to utilize virtual reality gaming platforms

> and digital technologies to put people in the middle of stories, to make them feel like they are present on scene. Much like the journalists, you become a witness. The participant, the reader and the user—some of this vernacular, we don't know how it's going to shape up—get a deeper, more visceral connection to the story, and that allows them sometimes to have a better understanding of what's happening in their world. (de la Peña, 2015e)

She is careful to say that this deeper understanding happens "sometimes", not always. However, it is the technological affordance of VR films—their ability to offer embodied and visceral experiences—through which VR films supposedly generate a deeper sense of connection and understanding.

Such visceral and emotional reactions in response to VR films are mentioned in de la Peña's 2015 TED talk titled 'The future of news? Virtual reality' (2015b) with over 1.3 million views, and in several interviews referring to *Project Syria*'s screening at Victoria & Albert Museum and at film festival. She refers to the tears and other instances of people being deeply moved after watching her VR films (de la Peña, 2015d). Her VR films are still grounded in facts, but immersive journalism "does not aim solely to present the facts, but rather the opportunity to experience the facts" (de la Peña, 2010, p.299). The technological affordance of VR to create *embodied* experiences is what evokes such deeply emotional reactions in some people. For example, discussing *Hunger in LA*, she says: "I knew I couldn't make people feel hungry, but maybe I could figure out a way to get them to feel something physical" (de la Peña, 2015b). It is the ability of VR technology to make people feel through and in their bodies that distinguishes it from other types of media.

More specifically, she refers to the sense of being in two places at once, which she calls 'duality of presence': "I'm not saying that when you're in a piece you forget that you're here. But it turns out we can feel like we're in two places at once. We can have what I call this duality of presence, and I think that's what allows me to tap into these feelings of empathy" (de la Peña, 2015b). The term duality of presence is supposed to capture how the mind can hold these two things at once (de la Peña, 2022). In her understanding, VR transforms the sense of place and the user's sense of self, which allows them to be a first-person participant in the virtual environment. They can then

access “sights and sounds, and possibly, the feelings and emotions that accompany the news” as the user is a subject in the news rather than a mere bystander (de la Peña *et al.*, 2010, p. 292). According to De la Peña et al. (2010), it is the first-person perspective that leads to empathy and better understanding of news.

The idea that duality of presence facilitates empathy may sound paradoxical at first, since it suggests the user’s presence being split rather than being integrated into the virtual environment. However, de la Peña’s understanding of empathy in relation to duality of presence makes sense once it is situated in the wider context in which VR technology and empathy is discussed. Foxman et al. (2021) conducted qualitative and quantitative analysis of discourses about the relationship between VR technology and empathy in mainstream (English) media outlets and academic literature. They argue that empathy’s impact on prosocial change is presented in two main ways in popular media outlets. One is prosocial change for people (i.e. enabling users to virtually embody someone else, to ‘walk into the shoes of another’) and the other is prosocial change for place (i.e. transporting the user to somewhere unfamiliar to them to feel closer to the issue at hand). De la Peña’s suggestion that the duality of presence helps to tap into feelings of empathy refers to this ‘prosocial change for place’, whereby the user is transported to another place to witness an event in person.

Nevertheless, it is important to note the occasional slippage between being transported into a place, connecting to a story, gaining understanding, and thinking that “this [being displaced] could happen to me too” (de la Peña, 2019). Here, the ‘prosocial change for people’ that Foxman et al. (2021) identified merges with the ‘prosocial change for place’. Rose (2018) attends to this slippage in her piece on the uses of nonfiction VR pieces to promote social change. She argues that, with the emergence of VR technology, ‘immersive witnessing’ is gaining traction in humanitarian and journalistic contexts. Immersive witnessing combines the technological affordance of VR to simulate rather than merely represent another’s experience to evoke a moral response (p.120). Rose (2018) ultimately concludes that immersive witnessing does not necessarily lead to a moral response, particularly when there is a collapse between ‘the self’ and ‘the other’. The moral force of witnessing lies in “empathy *and* analysis” (p.124, emphasis mine), requiring distance between ‘the self’ and ‘the other’. The proximity a user might feel towards refugees in the VR films

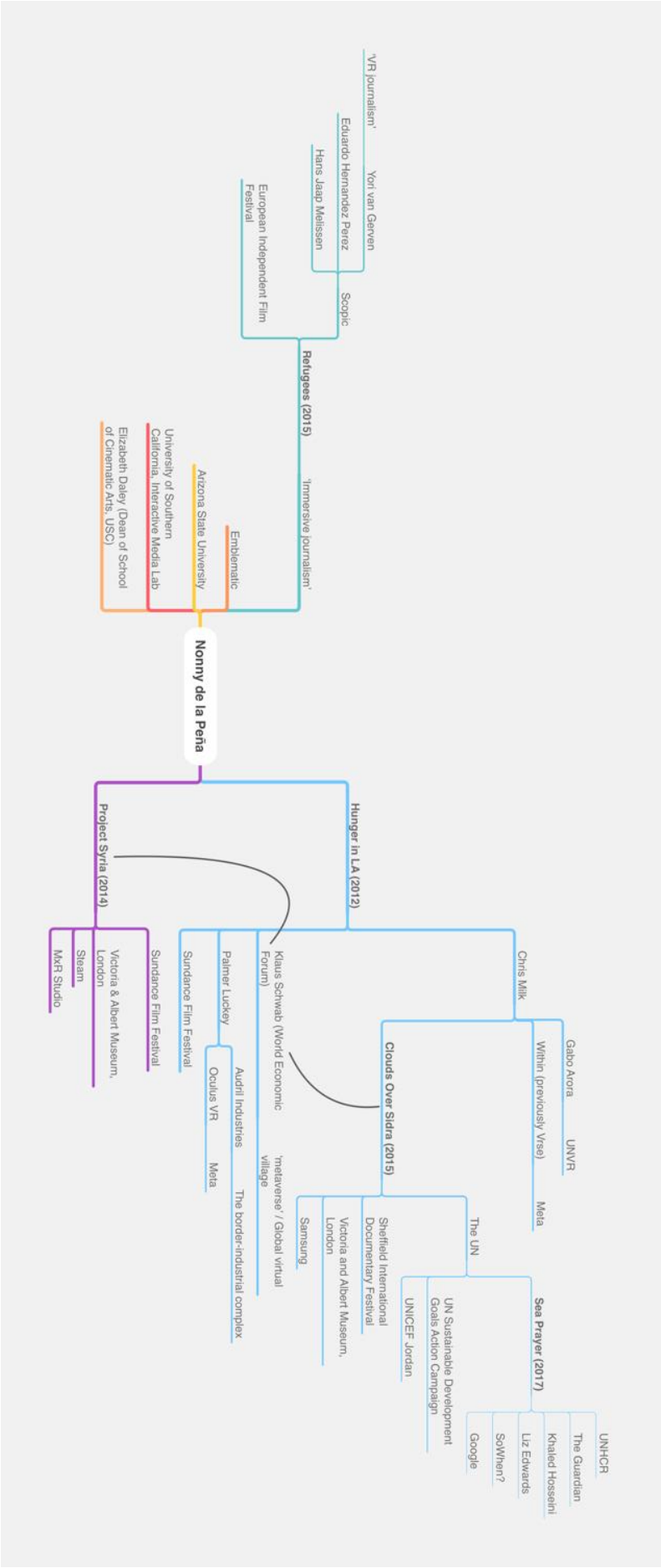
is also very short-lived (Sirriyeh, 2018), particularly in a short piece like *Project Syria* that only lasts for about three minutes. Equally importantly, because there is no consistent definition of empathy, the relationship between VR technology and empathy is expressed in the "aspirational language of potentiality", and there is a gap between VR's potential and its "actual usefulness to instigate prosocial change" (Foxman, Markowitz and Davis, 2021, p. 2180).

3.4 Network around 'the Godmother of Virtual Reality': the expansion of the VR market and the VR infrastructure

The media coverage and enthusiasm around *Project Syria*'s release goes back to *Hunger in LA*, which marked a turning point in terms of the people it inspired and connections it established around de la Peña. Figure 8 captures the network around virtuous VR on displacement of which de la Peña is part. Made in collaboration with the University of Southern California (USC) School of Cinematic Arts, the USC Institute for Creative Technologies, the Mixed Reality Lab, and the USC Annenberg School for Communication and Journalism (Gilmour, 2012), *Hunger in LA* was the first non-fiction VR film to be screened at Sundance Film Festival 2012 to much acclaim (Digital Cultures Research Centre, University of the West of England, 2015). Based on a real recording and reconstruction of a real life event using CGI like *Project Syria*, the film highlights the impact of the economic downturn by portraying a scene where a diabetic man queuing at a food bank collapses onto the ground. De la Peña discusses the ways in which the film created a sense of helplessness in the users that led them to have deeply emotional reactions, with some people even trying to help the man on the ground (de la Peña, 2018), despite knowing the experience was not happening in real life (de la Peña, 2015e). It was a moment she realised the potential of VR technology, and led her to coin the term 'duality of presence' (de la Peña, 2022). Palmer Luckey, a key figure in the VR world, was involved in *Hunger in LA*. He worked with de la Peña as an intern on the project and provided a prototype of what would become Meta's Oculus Rift headset, which instigated the commercialisation of VR technology (de la Peña, 2015d). While he is no longer active in the VR industry after being fired from Facebook (after its acquisition of Oculus VR, the VR company Luckey founded), he played a key role in the commercialisation of VR technology with the production of the Oculus headset, which was one of the first commercially viable VR headsets at the time. In this way, de la Peña's immersive journalism projects are connected to

technological innovation necessary for the expansion of the VR consumer market (Rose, 2018, p. 139).

Figure 8: De la Peña's network of virtuous VR actors (the four films analysed)



Moreover, Chris Milk, the producer of *Clouds Over Sidra* (Chapter 4) who had been working as a music video director, saw *Hunger in LA* at Sundance and was inspired to set up his own company Vrse (later known as Within). The company went on to work on *Clouds Over Sidra* with the UN. In an interview, de la Peña says that, "I think it was that sense of empathy that attracted some artists to the medium, like Chris Milk had his first experience in VR with *Hunger in Los Angeles*" (de la Peña, 2015d). She therefore laid the groundwork for the subsequent framing of VR as a generator of empathy, which went on to produce extensive media coverage from around 2015. It was also *Hunger in LA* that arguably initiated Klaus Schwab's, and therefore WEF's, increasing investment into VR technology with its launch of 'Defining and Building the Metaverse' initiative in 2022, and techno-optimistic coverage of VR technology on its website from the mid-2010s (Milk and Arora, 2015; Shashkevich-Stanford, 2018; Chow, 2023; World Economic Forum, no date b). In 2013, Elizabeth Daley, the Dean of the School of Cinematic Arts at the University of Southern California[48] where de la Peña was based, brought WEF Executive Chairman Klaus Schwab to USC to experience *Hunger in LA* (de la Peña, 2018, p. 210). Schwab subsequently "commissioned a piece about Syria on the spot" (de la Peña, 2015b), and provided a budget of $35,000 to create a piece about the Syrian 'refuge crisis' (de la Peña, 2018, p. 210). Daley and Schwab knew each other from WEF; Daley served as a chair of WEF's Global Agenda Council on Media, Entertainment and Information. *Project Syria*, the piece commissioned by Schwab, was eventually released in 2014. While de la Peña had to spend her own money to make *Hunger in LA* in 2012, there was more commercial interest in VR technology by 2014 and many of the major technology companies had released their first commercial VR headsets (Table 2). As Chapter 4 discusses, WEF is a key actor upholding the neoliberal capitalist world order, and *Project Syria* played a part in sparking WEF's interest in VR technology.

As of 2023, VR has not become a household product that the initial hype suggested, due to various reasons including clunky headset, high price, limited everyday usage apart from gaming, and cybersickness (McCauley and Sharkey, 1992; Evans, 2018).

[48] USC is well-known for its VR research. Since 2005, Albert Rizzo and Arno Harthold have been developing VR exposure therapy 'Virtual Iraq/Afghanistan', aimed at treating veterans who developed PTSD from the wars in Iraq and Afghanistan (USC Institute for Creative Technologies, 2021).

Following the announcement of job cuts (Murphy, Johnston and Criddle, 2022) and a decline in revenues and share prices at Meta in late 2022 (Murphy, Johnston and Criddle, 2022; Sherman, 2022), some media outlets have begun to talk about the metaverse "already [being] over" and not "having legs" (a reference to the avatars in Meta's virtual world Horizon Worlds not having legs) (Hern, 2022; Kelly, 2023). Still, it is worth noting the expansion of the VR market over the past several years, especially given the renewed push for the metaverse by organisations like WEF. The emergence of virtuous VR on displacement must be connected to corporate interests driving its popularisation and techno-optimistic discourses about VR technology.

From the early 2010s, more companies have entered the market; VR technology is being used in increasingly varied ways; and there are high hopes for the economic contributions VR technology makes to companies and national economies. VR technology has roots in the US military such as flight simulation (discussed more in Section 3.6). This trajectory is similar to many of the digital technologies enjoyed today[49], which took off thanks to initial state investment (Mazzucato, 2014). VR technology used to be primarily associated with the military, and then gaming, and has now come to play a role in training programmes (e.g. workplace and medical training), exposure therapy, education, and various business and manufacturing processes (Fortune Business Insight, 2021). Although gaming continues to account for the majority of VR content revenue (Omdia, 2021), consulting firm PricewaterhouseCoopers (PwC) highlights several industries and business areas that can benefit from VR and AR technology, even claiming that the VR/AR market can boost global GDP by $1.5 trillion by 2030 (PwC, 2019). McKinsey & Company has even written that the metaverse market will generate up to $5 trillion by 2030 (McKinsey & Company, 2022). It is within this expanding economic market and (manufactured) optimism that the emergence of VR films on displacement need to be situated.

There is a range of major technology companies investing into VR technology, and

[49] Contemporary digital technologies partially developed out of technological development during the First World War, which continued into the Cold War era on the assumption that machines will overcome human errors and limitations (Athique, 2013).

Table 2 shows the major players in the VR market that sells their own VR headsets. The VR industry itself comprises a wider range of actors, such as companies that produce infrastructure and content (Kim, 2021). I focus on companies manufacturing (or have tried to do so) their own VR headsets as it reflects their ambition to establish dominance in the emerging VR market through both hardware and software (Evans, 2018). Meta and Microsoft continue to be the leading players. Meta's Oculus headsets dominate the VR headset market, capturing 80% of the global VR headset market as of April 2023 (International Data Corporation [IDC], 2023). Although Meta has never disclosed its sales figures, some estimate that 10 million Oculus Quest 2 units have been shipped as of November 2021 (Hayden, 2021). Meta has also launched Horizon Worlds, a VR platform where people can socialise and play games. Microsoft, whose focus is on introducing its technologies into the workplace, has launched Mesh. This is a virtual environment that works in tandem with the meeting software Microsoft Teams, where people can be present in 3D avatars or XR representations of themselves. In 2023, WEF launched a prototype of 'Global Collaboration Village'[50] in partnership with Accenture and Microsoft, "supported by a consortium of leading global corporations, governments, international organizations, academic institutions and NGOs" (Schwab, 2023). According to Schwab, this is the "first global, purpose-driven metaverse platform" designed to encourage "public-private cooperation" (ibid.). Mark Zuckerberg announced Meta's name change from Facebook and its commitment to realising 'the metaverse' in 2021, he noted that this is not the job of one company (Zuckerberg, 2021). Given the number of major technology companies involved in the VR market, there is already an infrastructure in development to support such an endeavour. Given Meta's recent market failures in late 2022, the renewed push for metaverse by powerful transnational organisations like WEF driven by corporate interests can be understood as an attempt to save the metaverse project.

[50] This appears to be a nod to McLuhan's 'Global Village', which he coined to refer to how the development of digital media would lead to an interconnected world, "an organic whole" (McLuhan, 2013, p. 70).

Table 2: List of major technology companies that manufacture VR headsets

Company	Major events	HQ Country
Meta (previously Facebook)	Acquired Oculus VR in 2014. Announced its intention to create 'the metaverse' when it changed its name to Meta in October 2021.	USA
Google	Released Google Glass (wearable computer) in 2013 (discontinued in 2023), Google Cardboard in 2014, and Daydream View in 2016. The company abandoned its VR efforts in 2019. Daydream was smartphone-powered (i.e. you had to slot in a phone at the front of the headset) rather than a standalone VR headset like Oculus. In February 2023, Google, Samsung, and US digital telecommunications company (most notably semiconductor manufacturer) Qualcomm announced a partnership on Mixed Reality (XR).	USA
Valve	Released Valve Index in 2019. Strong player in the gaming market.	USA
HTC	Released HTC Vive in 2016. In the same year, the company founded accelerator fund Vive X, which has been investing in the VR/AR market.	Taiwan
Samsung	Released Gear VR, developed in collaboration with Oculus VR, in 2015. However, Gear VR is no longer available, and the company axed all of its VR applications in September 2020. Similar to Google, Gear VR was also smartphone-powered. In 2023, it announced a partnership with Google and Qualcomm.	South Korea
Microsoft	Released its first XR headset HoloLens in 2015. The company has a range of XR headsets, with a particular focus on business processes and education, though it is also active in the gaming market. The headset is sold for $3,500. In 2021, Microsoft released Mesh, a new mixed reality platform.	USA
Sony	Sony announced its launch of Project Morpheus, a prototype VR system that works with Playstation 4 in 2014. The company released Playstation VR in 2016.	Japan
HP	Released Reverb in 2019. Became an investor in the Venture Reality Fund in 2017.	USA
Apple	Apple is rumoured to be working on releasing a VR/AR headset in the next coming years. In 2020, the company acquired the VR company NextVR.	USA
DPVR	Founded in 2014, DPVR released the world's first all-in-one-VR headset in 2016. It is the third largest VR headset manufacturer globally as of April 2023 (IDC 2023).	China
Pico	Founded in 2015. The second largest manufacturer of VR headsets globally as of April 2023 (IDC, 2023). ByteDance, owner of TikTok, acquired Pico in 2021.	China

3.5 Emergence of virtuous VR: VR 'for good'

Since de la Peña's venture into VR technology, more technology companies mentioned in Table 2 as well as international organisations like the UN are investing in virtuous VR. According to Egliston and Carter (2022), VR is still "an emerging and imagined technology, less instantiated in a clear and concrete trajectory of technological innovation and evolution" (p.70). Consequently, the framing of VR as technology that can enact "positive impact and change" (HTC Vive, 2017) and used 'for good' is driven by structural factors rather than being rooted in reality. Moreover, terms like 'impact' and 'good' are taken for granted, never wholly defined. They rely on a common sense understanding—"a neutral and unchallengeable description of the world" (Gilbert and Williams, 2022, p. 26)—of what those terms evoke, depoliticising the process by which VR technology comes to be attached to the idea of 'good' and what interests lie behind it. Because the common sense is that empathy, compassion, and 'humanisation' are 'good' (Pedwell, 2014), the affixation of VR technology to this common sense makes VR intrinsic to the idea of 'social good'. This then reinforces the legitimacy of actors involved in virtuous VR who are ultimately interested in profit-making. In this process, corporations exercise cognitive power (Couldry and Mejias, 2019) by defining what entails 'social good'[51] (Magalhães and Couldry, 2021). One perfect avenue for corporations to attempt this endeavour is in the humanitarian sphere, an area that is intrinsically tied to the idea of 'doing good' by saving lives and alleviating suffering. Burns (2019a) argues that a growing number of technology corporations are incorporating philanthropy into their business model—what he calls philanthro-capitalism—and using digital humanitarianism (increasing adoption of digital technologies by humanitarian actors and in humanitarian operations) as an entry point.

Virtuous VR is an example of this marriage between digital humanitarianism and

[51] Magalhães and Couldry (2021) identify three features of 'social good' as defined by global digital corporations: datafied as "social good is generally taken as proportional to and made comprehensible by the quantity, type, and granularity of the data that can be gathered" (p.349); probabilistic, where some level of harm is seen as an inevitable counterpart to 'doing good' due to the reliance on algorithmic knowledge; and profitable, because corporations use 'doing good' as a way to sell their products and services.

philanthro-capitalism. Most famously, Oculus launched 'VR for Good' in 2016 "to drive important social change" (Meta Quest, no date). As part of this project, the company has created a host of VR experiences to raise awareness about social and political issues; hosts the 'high school 360 challenge' where students learn how to make VR films with equipment support from Oculus and mentorship from filmmakers; and hosts Creators Lab pairs filmmakers with non-profit organisations to create VR experiences in partnership (Meta Quest, no date). The UN has also been a key player in using VR technology to advance 'social good', specifically through its Sustainable Development Goals (SDGs) campaigns. It has even stated that VR technology inspires 'humanitarian empathy' (*Virtual Reality: Creating Humanitarian Empathy*, 2016)—a term used to describe how the technological affordances of VR engage the user as an active participant in the story to generate funds, awareness, and empathy. The UN has partnered with technology companies to further this endeavour. Just to name a few examples, in support of the UN's SDGs, HTC launched a $10 million VR fund 'VR for Impact' programme, unveiled at Davos 2017 (HTC Vive, 2017; Nafarrete, 2017); Sony partnered with the UN Environment Programme to create an immersive video to raise awareness about climate change; Google worked with UN Women to create a VR series about 'women's rights defenders' in 2019 (Google, 2019); Samsung provided the VR headsets at the World Humanitarian Summit in 2016, and has collaborated on various VR films with UN agencies (Samsung Newsroom, 2016); in January 2020, Microsoft set up a UN Affairs offices in New York to deepen its collaboration particularly on the SDGs (Microsoft, 2020). The UN is also seeking to incorporate digital technologies in its humanitarian operations[52], and the Office for the Coordination for Humanitarian Affairs published a report on how digital technologies such as artificial intelligence, biometrics, unmanned aerial vehicles, blockchain, and the Internet of Things can facilitate "earlier, faster and potentially more effective humanitarian action" (Tran, Jeridi and Aguiling, 2021). NGOs like World Vision, Amnesty International, International Rescue Committee, Médecins Sans Frontières, and Oxfam have similarly utilised VR technology in their fundraising and awareness-

[52] In 2019, the UN's World Food Programme announced a partnership with the data analytics firm Palantir, who has close ties to US intelligence and security services, causing outcry. Interestingly, it was reportedly the World Economic Forum that initiated this partnership between Palantir and the World Food Programme (Parker, 2019).

raising campaigns (International Rescue Committee, 2016; Amnesty International, 2017; Visualise, no date; World Vision, no date).

In the field of journalism, major English language news agencies have also entered the VR market in the past several years following the footsteps of de la Peña. Al Jazeera founded its immersive storytelling and media studio Contrast in 2017, which has produced several VR films on social and political issues including in partnership with World Vision (AJ Contrast, no date); HuffPost acquired the immersive media company RYOT in 2016 (Matney and Buhr, 2016); Guardian News & Media ran a VR team from 2016 to 2018 (Guardian News & Media press office, 2016) (which was led by Francesca Panetta, co-director of *Sea Prayer*) funded by Google (Southern, 2017); the New York Times launched NYT VR app in November 2015 with the release of *The Displaced* (Hopkins, 2017), which was again funded by Google (Watson, 2017, p. 28); and BBC ran its Virtual Reality Hub between 2016 and 2019 (Conroy, 2017; BBC News, 2019). While I discuss this in more depth in Chapter 5 (*Refugees*) and Chapter 6 (*Sea Prayer*), it should be noted here that it was technology companies like Google and Samsung that funded many of these immersive journalism projects during the 'initial hype' period of 2015-2016 (Watson, 2017; Kangasniemi, 2021). After this period, funding from technology companies dried up and many of those projects came to an end, as in the case of *The Guardian*. What is more, the smartphone-powered headsets that Google and Samsung were manufacturing lost out to standalone headsets that companies like Meta has been producing; Google and Samsung eventually shut down their VR headset production alongside VR projects, but details about their new collaboration on an Augmented Reality project came out in 2023 (Kharpal, 2023). In short, immersive journalism is another field in which technology companies attempted to establish market dominance.

The uses of VR technology in journalism cannot straightforwardly be categorised as virtuous VR since journalistic pieces adhere to journalistic standards and are not just made for advocacy or fundraising. Nevertheless, journalism plays an important role in shaping the humanitarian imaginary, a communicative structure that represents the Global South to the Global North and communicate the imperative to act (Chouliaraki, 2013, p. 138). Some immersive journalism projects such as *Hunger in LA* and *Project Syria* can be described as virtuous VR in the sense that they are premised on the idea

that VR is “above all a ‘good’ technology, one that promotes compassion, connection, and intimacy” (Nakamura, 2021, p.48). In fact, while traditional journalistic principles might discourage journalists from doing ‘advocacy’, de la Peña offers a different take. When making *Hunger in LA*, she included a link to food banks at the end of the film as she grappled with her “responsibility when I put people through this incredibly emotional experience” (de la Peña, 2015e). Her perspective on immersive journalism that embraces the potential of VR to create a “more visceral connection to the [news] story” (de la Peña, 2015e) to enable a deeper understanding of the issue at hand seems to be taking root in the news industry. Although many major news agencies have folded their VR projects due to lack of funding, it has become more acceptable for news agencies and journalists to use VR technology in their reporting to transport the user into a place that they may not be familiar with, so that they better understand, and even empathise with, people’s experiences of hardship in faraway places (Foxman, Markowitz and Davis, 2021).

All of those different actors comprise the “collaborative terrains” (Littler, 2016, p.3) affixing a cultural meaning to VR technology, namely that it is a ‘good’ technology being used to raise awareness about important issues around the world, to make people feel and spur them to action, and to create better people and society. As mentioned in the Introduction, many empirical studies have bought into this framing, working from the premise that empathy is ‘good’, therefore VR is ‘good’ if it can generate empathy. However, it is important to question what is meant by ‘good’—good for what, and for whom? What is the function of labelling VR as such?—and to examine the assumptions, the broader context, and the consequences of such a framing of VR technology, particularly in relation to displacement given the focus of this thesis.

The next two sections highlight two aspects of what this framing of VR as ‘good’ obscures. One is the historical entanglement between VR technology and the military, and how the technology is now firmly embedded in the border-industrial complex comprised of a host of actors who profit from the provision of increasingly digital ‘solutions’ to the ‘problem’ of migration. The following section argues that contemporary capitalist world reflects modernity/coloniality, whereby capitalist development is dependent on modern/colonial dynamics of extraction of data and raw materials, environmental destruction, labour exploitation, and coloniality of knowledge.

The concluding section brings those discussions together and argues that virtuous VR is a response to refugee 'crisis'; a generic, universal humanity plays a key role in obscuring the differential distribution of humanity and reproduces the positioning of the Global North as an "innocent bystander" (Danewid, 2017, p. 1680)

The next section discusses the historical and contemporary uses of VR technology for military purposes. If uses outlined in this section can be framed as uses of VR technology to sensitise users—for instance, training or increasing the capacity for the target audience to feel for others, and to do things for others—militaristic uses of VR technology can be framed as one use of VR technology to desensitise—i.e. to desensitise soldiers to the fact that they are being trained to kill and to destroy.

3.6 Border-industrial complex, militarisation, and VR technology: Empathy/killing machine?

Section 3.4 mentioned the long-standing connection between de la Peña and Palmer Luckey, the founder of Oculus VR and a key figure in the commercialisation of VR technology. Luckey's trajectory exemplifies what this section seeks to highlight: the deepening relationship between VR technology, arms industry, border security industry[53], and the militarisation of borders. After Facebook fired Luckey for his financial contributions to pro-Donald Trump and far-right groups (Bursztynsky, 2019), he founded a defence company Anduril Industries in 2017. The company provides 'smart border' technologies such as the AI software platform Lattice to the US Customs and Border Protection; in other words, technologies that assist the US government to track, detain, and deport migrants and refugees along the US-Mexico border (Beaumont, 2022). The company is also working with various agencies including the US Department of Defense, US Department of Homeland Security, and the UK Ministry of Defence (Anduril Industries, 2021). This example reflects the longer entanglement between the arms industry and VR technology, and its uses for military purposes that this section explores.

[53] The border security industry is comprised of businesses that offer "all equipment, technologies and services to surveil and patrol borders in order to monitor, detect, stop, arrest, turn away or deter people from crossing them" (Akkerman, 2021, p. 8).

Following Luckey's case, this section considers the relationship between the arms industry (particularly in the US) and VR technology to highlight what the cultural discourse of VR technology itself as 'good' obscures. While origin stories of technologies are not sufficient reasons to reject them (Haraway, 1991; Sophia, 1992), I show below that the military and the arms and border security industries continue to invest heavily in VR/AR technologies. The historical and contemporary entanglements between the arms industry and VR technology are particularly important when discussing virtuous VR on displacement. The technology that is supposedly being used to support refugees are, at the same time, being used to perpetuate imperialist military violence and conflicts—the very reasons for the displacement and forced immobility of so many people around the world. This reflects the "border-industrial complex" (Miller, 2021), a host of actors whose interests converge around profiting from the militarisation and policing of borders and human movement (Lemberg-Pedersen, 2012; Akkerman, 2021). It is in the interest of these actors to make people flee through the technologies that they develop and sell, and then stop them from fleeing using the same technologies. A discussion of the historical and contemporary entanglements between VR technology, the arms industry, and the military therefore foregrounds the seemingly conflicting ways in which VR technology is used: as a sensitising technology as seen in its uses to generate and teach empathy that I discussed in the previous section, and as a desensitising technology as seen in the case of the arms and border security industries and the military.

VR technology would not have developed to the extent it has without the concerted investment by states, particularly the US government, the military, aerospace, and intelligence agencies (Chesher, 1994; Barbrook and Cameron, 1995; Harley, 2022). This mirrors Mazzucato's (2014) argument that, contrary to the popular image of technological innovation and places like Silicon Valley as being driven by 'genius' individuals and free market-driven entrepreneurship, the state plays a pivotal role in technological innovation and advancements as a partner of the private sector. For example, flight simulators have played a huge role in the development of VR technology. In 1929, American inventor and aviation enthusiast Edwin Link created the flight simulator Link Trainer to train pilots. The US military eventually acquired the technology for training, and Link Trainer trained over 500,000 US pilots during Second World War (Naval Air Station Fort Lauderdale Museum, no date). In 1968, Ivan

Sutherland created the first 3D head mounted display that tracked the user so that they saw the computer graphics to reflect changes in the user's position (Gigante, 1993, p. 5). He initially designed this to be used for flight simulation, but he envisioned a wider application (Evans, 2018, pp.22-23). This research was funded by Harvard University's endowments with ties to slavery, and supported by the US Air Force and the Central Intelligence Agency (Harley, 2022, p.10). Thomas Furness[54], referred to by some as "the grandfather" of VR (The Academy of International Extended Reality, 2021), has made significant contributions to the development of VR technology, particularly while working at the US Air Force's Armstrong Medical Research Laboratories (Gigante, 1993). Furness was tasked with designing cockpits for military aircraft, which culminated in the creation of the Super Cockpit programme in 1986 that significantly simplified the controls in the cockpit and created a more intuitive virtual environment for the pilot using tracking, artificial intelligence, and 3D visuals (Bye, 2015; Mertz, 2019).

As an extension of such developments, VR/AR technology is now being used extensively for military training, for example for the UK Royal Air Force's Chinook Mk6 helicopter training developed by the defence company Lockheed Martin (Lockheed Martin, 2015) which enables "high risk training operations", such as battlefield re-supply or medical evacuation (Ministry of Defence, Defence Equipment and Support and Lancaster, 2018). In pilot training and flight simulation, VR technology is used to simplify controls and to sensitise soldiers to potentially destabilising and high risk situations, so that they are *not* moved when they do face those situations in real life. In this sense, VR technology sensitises soldiers to military combat but desensitises them to their participation in a killing machine that is the military.

There are plenty of other examples of VR technology being put to military uses. In 2018, Microsoft, a leading player in the VR/AR/XR market, concluded a $480 million contract with the US Army to produce prototypes of the Integrated Visual Augmentation System (IVAS) headset based on the commercial XR headset HoloLens, which will "keep soldiers safer and make them more effective" by providing "situational

[54] He eventually left the military and established the Human Interface Technology Lab at the University of Washington.

awareness, enabling information sharing and decision-making in a variety of scenarios" (Kipman, 2021; Novet, 2021). In response, around 50 employees wrote an open letter opposing the development of weapons technologies and demanded the company abandon the contract and guarantee never to sign military contracts (Thompson, 2019). Despite such opposition, Microsoft moved forward to the production phase in 2021 (Kipman, 2021), concluding a contract reportedly worth up to $21.9 billion (BBC News, 2021). Since then, leaked reports from the military in 2022 said that the headsets cause headaches, nausea, and eyestrain that make them unusable in practice, and the army is trying to fix those issues (Clark, 2023). Israeli army also purchased Microsoft's HoloLens in 2016 so that they could develop software for military uses; reportedly, the army was in touch with Microsoft to share feedback[55] (Ackerman and Bass, 2016). The US Department of Defense is also working with various companies including Samsung to provide 5G testbeds to support VR and AR-based live field military training exercises (U.S. Department of Defense, 2020; Samsung, 2021). Outside of the US, the British Army is exploring the potential of VR technology in training through its Virtual Reality In-Land Training (VRLT) pilot programme, developed by Bohemia Interactive Simulations (BiSim)[56] through a £1 million contract[57] (The Ministry of Defence and Andrew, 2019; The British Army, 2021); the German Armed Forces also purchased BiSim's simulation software Virtual Battlespace 3 licences in 2014 to train soldiers (Army Technology, 2014); the Royal Air Force has worked with software company SimCentric[58] to develop and test training simulation, with £300,000 funding from the UK Ministry of Defence's Defence and Security

[55] More generally, Katz (2021) describes how Microsoft benefits from Israel's settler colonialism. The company not only provides Israel with technologies that are then used to as the backbone of the Israeli army and to kill, dispossess, and main Palestinians. It also acquires start-ups that emerge from Israel's surveillance and counterinsurgency units, and provides the digital infrastructure necessary for Israel's bureaucratic infrastructure.

[56] In March 2022, one of the top global arms company BAE Systems acquired BiSim for $200 million in an effort to strengthen its training and simulation capacity (BAE Systems, 2022).

[57] This is part of the £800 million Defence Innovation Fund (The Ministry of Defence and Andrew, 2019).

[58] The connection between gaming and the military has been pointed out by scholars (Power, 2007). SimCentric also demonstrates this link, as the simulation is based on a 3D computer graphics gaming framework developed by Epic Games, creator of the hit game Fortnite (Defence and Security Accelerator, 2021).

Accelerator (DASA)[59] (Royal Air Force Families Federation, 2020); and since 2017, the Israel Defense Force has been using VR technology, including Meta's Oculus and HTC's Vive headsets, to train soldiers how to navigate tunnels made by Hamas (Ackerman, 2017; Vardi, 2019).

This close relationship between the military and the VR industry goes back to the early days of VR technology. VPL Research, established by Jaron Lanier in 1984 who is said to have coined the term 'virtual reality', developed one of the first commercial VR headsets[60]. In his book that is part-biography and part-history of VR technology, he writes that VPL Research took on military contracts from the US government agency Defense Advanced Research Projects Agency and "other military entities", details of which he still cannot disclose except that they created "wild stuff, unprecedented at the time" (Lanier, 2017, chaps 16, Section 7, paras.1-2). He was initially wary of military contracts as he believed they would hinder creativity, but suggests the company took them on as a challenge, even though VPL research employees were unsure about whether they could meet the stringent requirements of military contracts due to the nascent nature of the technology.

In the same way that video games provide an immersive battlefield—even being used as a recruitment tool—and normalise militarism, the uses of VR for military purposes "propagate an image of war as bloodless play, which consolidates an ethos of militarization" (Power, 2007, p. 285). Given the dominant application of VR technology to gaming, the relationship between VR technology and the arms industry and the military builds on the historical entanglements between video games and militarism (Power, 2007). Robinson (2012) argues that the extensive investment of the US military into simulation and modelling highlights the importance of the military-entertainment complex. The growing integration of VR technology into military training reflects the increasing turn towards 'net-centric warfare', where "computer technology has become increasingly integral to military supremacy on the battlefield" (Robinson,

[59] Established in 2016, DASA connects and funds technological innovation to support UK's defence and security (Defence and Security Accelerator, no date).

[60] Headsets in the 1980s and 1990s were too heavy, clunky, and expensive to lead to successful commercialisation and popularisation.

2012, p. 509). Interestingly, the USC Institute for Creative Technologies—which was involved in the creation of de la Peña's first VR film *Hunger in LA* and has developed VR exposure therapy 'Bravemind'—was founded in 1999 by the US military for $45 million (Robinson, 2012). Moreover, the example of the failure of Microsoft's HoloLens to work in practice demonstrates that whether it actually works may not even matter. As Katz (2021) argues, states like Israel can claim that they are using the latest technologies to market itself as a technologically sophisticated state, while companies like Microsoft can financially benefit from such propaganda.

There is money to be made from the continuing collaboration between VR technology, the military, and the arms and border security industries. The global border security market is burgeoning, with its value is projected to grow from $44 billion in 2020 to $60 billion by 2028 (The Insight Partners, 2021). While the arms industry faced a decrease in demand and investment after the Cold War, border security has provided a new market due to the renewed investment into counterterrorism and border security after the 9/11 terrorist attacks in 2001. As more private security companies have become involved in EU border control (Lemberg-Pedersen, 2012), companies and lobbying groups[61] in the border security industry present themselves as 'experts'; this enables them to define the 'problem' (migration) and to offer 'solutions' (their services), which often utilise digital technologies (Akkerman, 2021, p. 15). In the European context, Frontex is a significant player in the border security industry. Its responsibility and funding over the EU's research and development of digital technologies for border security has been growing, for example through the research and innovation funding programmes Horizon 2020 (2014-2020) and Horizon Europe (2021-2027) (Douo, Izuzquiza and Silva, 2021). The Horizon 2020 project 'SHOTPROS' uses VR technology to train police officers "under stress and in high-risk operational situations" (SHOTPROS project, no date), and Frontex has attended its conference with a view of using it for "border management" (The European Border and Coast Guard Agency, 2022). ARESIBO (Augmented Reality Enriched Situation awareness for Border

[61] Examples of border security industry lobbying groups in Europe and the US include European Organisation for Security (EOS) and National Defense Industrial Association (Akkerman, 2021, p. 16). Lemberg-Pedersen (2012, p. 162) points out that private security companies seek to create demand for its products through EOS.

security) is another Horizon 2020 project that Frontex oversaw. The AR headsets mentioned in the project are American industrial wearable devices company RealWear's Realwear HMT-1, and Microsoft's HoloLens 2 (Conceição, 2021). Although Frontex says that it does not meet with lobbyists, investigations found that it holds multiple meetings with companies in arms and border security industries (Douo, Izuzquiza and Silva, 2021). While states are the ultimate decision-makers of EU border and migration policies, Frontex has the power to decide which digital technologies it needs to carry out its mandate (ibid.).

It is also important to underline that the financial sector plays a crucial role in the growth of the border security industry (Lemberg-Pedersen, 2012; Lemberg-Pedersen, Hansen and Halpern, 2020; Akkerman, 2021). In the context of Europe, such actors include "the banking sector, investment firms, European financial institutions, pension funds, insurance companies and [EU] Member States' export credit agencies" (Lemberg-Pedersen, Hansen and Halpern, 2020, p. 89). Those actors own shares or bonds of border security companies, distribute grants, and underwrite loans or credit facilities (Lemberg-Pedersen, Hansen and Halpern, 2020, p. 91). Governments also control and own companies. For example, the Italian government owns roughly 30% of the aerospace, defence and security company Leonardo (Leonardo, 2022); and the governments of France (roughly 11%), Germany (roughly 11%), and Spain (roughly 4%) own aerospace and defence company Airbus (MarketScreener, 2023). Another way in which states fund border security companies is through export credit associations (ECAs) like Export Credits Guarantee Department (UK), Hermes (Germany), SACE (Italy), and Coface (France) (Lemberg-Pedersen, 2012). They are government-supported institutions that provide funds to banks and companies to mitigate export risks (ibid.). ECAs enabled the export of border control technologies to countries like Libya in the early 2000s when Libya became one of the main transit routes, as well as other countries like Israel, Turkey, Bulgaria, Morocco, and Egypt (Lemberg-Pedersen, 2012, pp. 158–159). All of this reflects the convergence of state and private interests around the border security industry (Lemberg-Pedersen, Hansen and Halpern, 2020). Major investment companies including Blackrock, Morgan Stanley, and the Vanguard Group are also shareholders of many companies in the border security industry, pursuing a strategy of passive investment where they invest in a range of companies to make profit gradually over time (Akkerman, 2021, pp. 19–

20). It is worth returning to the winners of neoliberal capitalism mentioned in the introduction: financial and technology sectors. Both sectors are becoming integral to the border-industrial industry involving states, the military, and arms companies who profit from the framing of migration as a security issue and as a 'crisis', to which digital technologies are proposed as solutions. At the same time, technologies like VR that are very much part of the border security industry and militarisation are being framed as 'good' through virtuous VR.

Various justifications are offered for using VR, AR, and XR technologies for military purposes: preparing soldiers for the reality and complexity of combat that cannot otherwise be replicated easily for training purposes (The Ministry of Defence and Andrew, 2019); collecting data (e.g. stress levels, voice, and eye movements of soldiers) to improve the performance of soldiers in the field (The British Army, 2021); "protect[ing] the freedoms we [Americans] enjoy" (Microsoft CEO Satya Nadella quoted in Novet, 2021); helping "soldiers target enemies and prevent[ing] the killing of civilians" (the Army quoted in Novet, 2021); and, ultimately, saving lives (Kingsman Sebastian Grigg from 1st Battalion The Duke of Lancaster's Regiment quoted in The British Army, 2021). The emergence of virtuous VR and the discourse of VR as 'good' technology obscures the uses of VR technology for military purposes that tie the technology to the global arms industry and conflicts that kill people and leave others no choice but to flee. In contrast to the uses of VR 'for good' outlined in the previous section, this section has highlighted the contradictory ways in which VR technology is being used. The deep connection between the military, arms and border security industries, and VR technology raises the question: 'good' for whom?

3.7 Digital technologies and the modern/colonial world

The previous section demonstrated the historical entanglement between VR technology, the arms and border security industries, and the military. I see this as an expression of virtuous VR's implication in the modern/colonial world, where the technology is part of industries and the military that profit from the lives of people on the move. This section expands this discussion to characterise the current neoliberal world order dominated by financial and technology sectors (Gilbert and Williams, 2022) itself as a modern/colonial world, where capitalist development, 'modernisation',

and colonialism are inseparable. I argue that actors invested in virtuous VR are also the beneficiaries of this world order. To recapitulate, modernity/coloniality comprises three elements: coloniality of power (heterogenous and interlocking hierarchies that exist globally for the purposes of domination and exploitation), coloniality of knowledge (the power relations involved in knowledge production), and coloniality of being (the power relations that define who 'the human' is).

In order to illustrate my argument, I focus on three areas upon which neoliberal capitalism driven by digital technologies depend: extraction of data and raw materials and environmental destruction, labour exploitation, and coloniality of knowledge and cognitive power (Couldry and Mejias, 2019). All of these dynamics exacerbate inequalities, transferring wealth from the poor to the wealthy, and entrenching exploitative relations between the Global South and the Global North through extractive industries and labour exploitation. I use Couldry and Mejias' (2019) concept of data colonialism and literature from materialist media studies to foreground the "dirty, toxic, and energy-intensive extractive industrial processes" upon which digital technologies depend (Taffel, 2021, p. 6). Although I focus on these three areas, more broadly speaking, major technology firms function in ways that entrench and reproduce a colonial hierarchy of humanity along the lines of class, race, and gender. For instance, Little and Winch (2021) argue that American technology firms such as Facebook, Google, and Amazon operate as colonial households with the (white, cis, male) founders acting as the patriarch. As colonial households, technology corporations depend on and exacerbate classed, racialised, and gendered inequalities. Drawing on such literature, the expansion of the VR market, and the collaborative terrain involving corporations, international organisations, NGOs, and nation-states can be understood as a search for new frontiers for capitalist exploitation and appropriation. In this context, virtuous VR provides a "cultural alibi" (Nakamura, 2020, p. 49) for such endeavours.

Extraction of data and raw materials

The extraction of data was immediately on my mind when I started using Oculus Quest 2, the headset produced by Meta, to watch *Project Syria*. Since October 2020, Oculus requires users to link their Facebook account to the Oculus headset; Meta simultaneously updated its privacy policy to say that the data collected through the

headset will be used for advertising (Hamilton, 2019). Since I did not want to link my personal profile to the headset, I created a new account just for research purposes. The privacy policy has been updated since then, and the one that came into effect in April 2022 states that the data collected through Oculus products will be used "to provide, personalise and improve the Meta Products…to provide measurement, analytics and other business services (including ads)…" (Meta, 2022)[62]. The fact that users have no choice but to link their different social media accounts in order to use this headset provides a glimpse into how technology companies like Meta are seeking to make profit from VR technology.

Many scholars have theorised how technology companies are driven by a logic of profit-making through data extraction from ever-expanding areas of human life. For example, Zuboff (2019) has termed this logic 'surveillance capitalism', whereby technology companies profit from trading data generated through the surveillance of human experience. Similarly, Couldry and Mejias (2019) have proposed the concept 'data colonialism' to refer to the next stage of capitalist expansion, where increasingly more human relations are converted into data so that they can then be extracted, analysed, and sold for profit. Although Zuboff (2019) and Couldry and Mejias (2019) analyse the role of digital platforms in providing "structured online spaces…for data extraction" (Couldry and Mejias, 2019, p.25), the main difference between their work is that the latter identifies common structures of exploration, expansion, exploitation, and extermination between 'historical colonialism' and data colonialism. As an extension of 'historical colonialism', which entailed "an appropriation of land, bodies, and natural resources", data colonialism involves the appropriation of social resources and extraction of value through their conversion into data that can then be sold (Couldry and Mejias, 2019, p. 85).

One aspect of data colonialism is changes in communication infrastructures, specifically their integration into more and more aspects of human life over the last few decades. Meta, Microsoft, and WEF among others are attempting to create a digital platform (the metaverse) where data from human interactions can be extracted and

[62] It also states that the data will be used "to promote safety, security and integrity, to communicate with you [the user], and to research and innovate for social good" (Meta, 2022).

appropriated for profit. This is taking place in several areas of our lives, from gaming, training, non-profit campaigning, news, and social networking. Imagined as a place where people live, work, and socialise (Zuckerberg, 2021), the metaverse is the ideal digital platform to extract data from every aspect of human life that previously could not be accessed by corporations.

VR technology plays a crucial role in this project as every movement can be made into data. For example, there is evidence to suggest that users can be identified using motion tracking data in VR with high accuracy, even if the motions were not specifically designed to enable the identification of users (Miller *et al.*, 2020). The fact that users of Oculus Quest headsets are now forced to link their various social media profiles creates possibilities to cross reference and analyse data collected via Oculus and other social media platforms that Meta owns, such as Facebook and Instagram. Given that as much as 97% of Meta's revenue comes from advertising as of February 2022 (Johnston, 2022), this paves the way for accessing new layers of human experience through VR to extract data, which can be used for advertising or to assess customer engagement with advertising (Egliston and Carter, 2021; Irwin, 2022). Meta's patents also indicate its ambitions to use biometric data collected through VR technology to sell virtual ads (Irwin, 2022). For example, biometric data can be used to create realistic digital avatars, and users will be able to purchase sponsored digital items (Murphy, 2022). Another example is personalised advertising in AR and measuring engagement through biometric data (ibid.).

In contrast, Microsoft, as a cloud platform, comprises the infrastructural sector that enables data collection by firms like Meta[63] (Narayan, 2022). For this reason, the focus may not be so much on data collection for advertising but to sell its Microsoft Clouds services as a set—they call this the 'metaverse technology stack'—and to expand its cloud infrastructure upon which platform capitalism relies (Srnicek, 2016; Narayan, 2022). While each layer of the technological stack (e.g. Mesh and HoloLens that allows access to XR environments or Azure Internet of Things) can be used on its own, Microsoft markets these products as a 'technological stack' to enable seamless

[63] Meta and Amazon Web Services has had a 'long-term strategic partnership' but Meta announced its partnership with Microsoft Azure in December 2021 (Amazon Web Services, 2021).

transition between different layers of Microsoft products (George, 2021; Microsoft, 2021). Framing the VR/AR/XR as part of a holistic product offer of 'metaverse technology stack' can therefore be seen an attempt by Microsoft to expand its market reach against Google and Amazon Web Services who are the other major cloud-service providers[64], as well as to further expand platform capitalism through the growth of cloud computing infrastructure.

In addition to extraction of data, as Taffel (2021) and Crawford and Joler (2018) point out, it is important to attend to the materiality of digital technologies. VR technology is part of extractive processes; Oculus Quest 2 is made of plastic, powered by rechargeable lithium-ion battery, and runs on the chip called Snapdragon 835 which uses silicon. The environmental impact of digital technologies is immense, and extractive industries upon which they depend reinforce exploitative relations between workers in the Global South and technology corporations in the Global North. For instance, digital devices depend on plastics (therefore oil) and the mining of elements like rare earth elements (found in China), silicon (China is the top producer followed by Russia and Brazil), lithium (found in South America, mostly in Bolivia), and cobalt (found in the Democratic Republic of Congo, infamous for child and enslaved labour in the mines).

Moreover, data centres—which are essential to companies like Google, Meta, and Microsoft— and cryptocurrencies like Bitcoin consume huge amounts of electricity and water; and the manufacturing and transportation of digital devices are predominantly powered by fossil fuels (Ensmenger, 2018; Taffel, 2021), which contribute to climate change that disproportionally affects the Global South. Electronic waste fills up landfills and causes pollution (Ensmenger, 2018) not only in the Global South. In the Silicon Valley, the heart of digital technologies, poorer areas with high percentage of migrant and working-class populations have long suffered from pollution (Park and Pellow, 2004). In fact, Silicon Valley is home to "the single largest concentration of Superfund sites" which are designated by the US government as dangerously polluted and in need of immediate action, mostly due to semiconductor manufacturing (Ensmenger,

[64] In the last quarter of 2021, AWS had 33% of the cloud infrastructure market, followed by Microsoft Azure with 21%, and Google Cloud with 10% (Richter, 2022).

2018, p. S25). Park and Pellow (2004) provide a valuable historical account that traces the environmental racism and Silicon Valley's development to the Spanish colonisation of Indigenous Ohlone people in the 1700s, which entailed enslavement and environmental destruction. From 1870 and 1970, exploitable migrant (especially women) labourers worked at orchards and canneries of the Valley and Bay Area, which were dumping waste and contaminated water in the area where working-class migrant communities lived. In the 1950s, electronics manufacturers moved into the area and sold themselves as a 'clean' industry. In reality, companies polluted the land, water, and people in the area, and many of the workers producing computers and semiconductor chips were women, immigrants, and people of colour who were exposed to dangerous chemicals on a daily basis (Park and Pellow, 2004, p. 418). As this brief account shows, digital technologies depend on extraction of resources and destruction of the environment; importantly, such effects are produced differently along lines of gender and race as an expression of coloniality of power.

Labour exploitation

Digital technologies have developed and continue to develop on the back of workers often labouring in dangerous conditions for little pay and few protections. Many scholars have pointed out the dependency of the digital economy on human labour, contrary to its image of being an 'immaterial' economy. For example, addition to the labour of mining raw materials mentioned above, many digital technology companies rely on an exploited labour force. Based on research with platform workers in South Africa, Kenya, Nigeria, Ghana, and Uganda, Graham and Anwar (2019) argue that there is an emergence of "'planetary labour market' in digital work" (p.3). Digital labour platforms such as Upwork and Uber are located primarily in the US; workers are badly paid and have no collective bargaining power (ibid.). Such companies extract value from the Global South to the Global North (where the company is based), and they expect to be able to monetise the data they are collecting even when they are making a loss (Howson *et al.*, 2022). Crowdwork platforms like Amazon's Mechanical Turk, content moderation, and data labelling for Artificial Intelligence (AI) depend on exploited labour, with some companies specifically targeting workers in the Global South, such as India, the Philippines, and Kenya, for cheap labour (Altenried, 2020).

While some of those examples are not directly relevant to VR technology, it speaks to

the broader socio-economic order that has been emerging alongside the hegemony of neoliberal capitalism. VR technology is part of an economic system that is not only looking to extract data from previously inaccessible areas of life but also seeking to include an increasingly heterogenous labour force (Mezzadra and Neilson, 2013; Altenried, 2020). In particular, more women are performing digital labour at home, and workers in the Global South are becoming part of this system due to the expansion of digital infrastructure (Altenried, 2020); this, again, shows how capitalist development continues to function along racial and gendered lines.

Refugees are no strangers to this emerging digital economy. US-based company Sama, which provides data labelling services for companies like Google, Microsoft, and Meta, recently came under fire for paying $2 per hour to its workers in Kenya (Perrigo, 2023). Back in 2011, Sama was working with refugees in Dadaab camp in Kenya to train them in computer skills to do work for companies in Silicon Valley (Hegarty, 2011). Founder of Sama, Leila Chirayath Janah, at the time said that the company provides a chance for people to be “producers in the global economy” (Hegarty, 2011). Within this context, there is much to be learnt from scholars who understand refugees and migrants as integral to capitalism rather than (merely) subjects of humanitarianism. For example, Rajaram (2018) argues that refugees and migrants are ‘surplus populations’ who are integrated into capitalist modes of production by virtue of their exclusion as cheap and disposable labour. The modernity/coloniality framework is important here, as capitalism relied on enslaved and indentured labour from its inception, organised along racial and gendered lines. Moreover, refugees are also part of the digital economy as people who perform unpaid labour, as Tazzioli (2022) shows based on feminist scholarship on unpaid labour (e.g. Federici, 2020). Using examples of financial and digital technologies in displacement (such as UNHCR’s use of chatbots in refugee camps in Jordan and Lebanon, participatory digital mapping project in Za’atari camp in Jordan, and the European Commission and UNHCR’s Refugee Cash Assistance Program using a prepaid card), she argues that refugees are involved in unpaid labour under the guise of ‘voluntary’ activities. As ‘customers’ of such services, refugees are pushed to provide feedback and participate in digital initiatives without receiving any benefits. They become sources of data and knowledge extraction and profit-making for the benefit of corporations.

Coloniality of knowledge and cognitive power

As the economic power ('the power to make value') of technology companies grow, their cognitive power ('power over knowledge') also increases (Couldry and Mejias, 2019, xii). As mentioned in Section 3.6, those who are benefitting from the modern/colonial order also gains the power to define what constitutes 'good' (Magalhães and Couldry, 2021), reflecting the coloniality of knowledge. The collaboration between nation-states and border security companies who collectively define migration as a 'problem' to which technological 'solutions' are required is another example of cognitive power.

More specifically, virtuous VR on displacement provides a particular way of knowing displacement and refugees' lives. It is technology that renders displacement knowable not just through the content of virtuous VR but also through the way media shape and change human relations and how people understand the world. The techno-optimistic discourse presents VR as a *better* medium for knowing the realities of displacement, compared with reading a book, watching a 2D film, or indeed listening to refugees. This knowledge about displacement supposedly comes through the technological affordances of VR such as immersion and presence, as de la Peña discusses. Much like Pedwell's (2014) work on immersion programmes for international development professionals, immersion is assumed to provide unmediated access to reality in the form of 'felt truth'. Feeling is equated to knowing. Technology that promotes this way of knowing is presented as a more authoritative way of knowing than the voices of refugees themselves. As Nakamura (2020) points out in relation to VR films, and Sirriyeh (2018) and Cañas (2016) in relation to experience-based campaigns, if the audience of VR films needs to experience and/or feel something themselves to believe or understand the reality of displacement, they are merely consuming refugees' lives based on a fundamental distrust. In the process, corporations and organisations can collect data using VR technology, which they can use to improve their products and fundraising campaigns, as well as justify their continued usage of VR 'for good'.

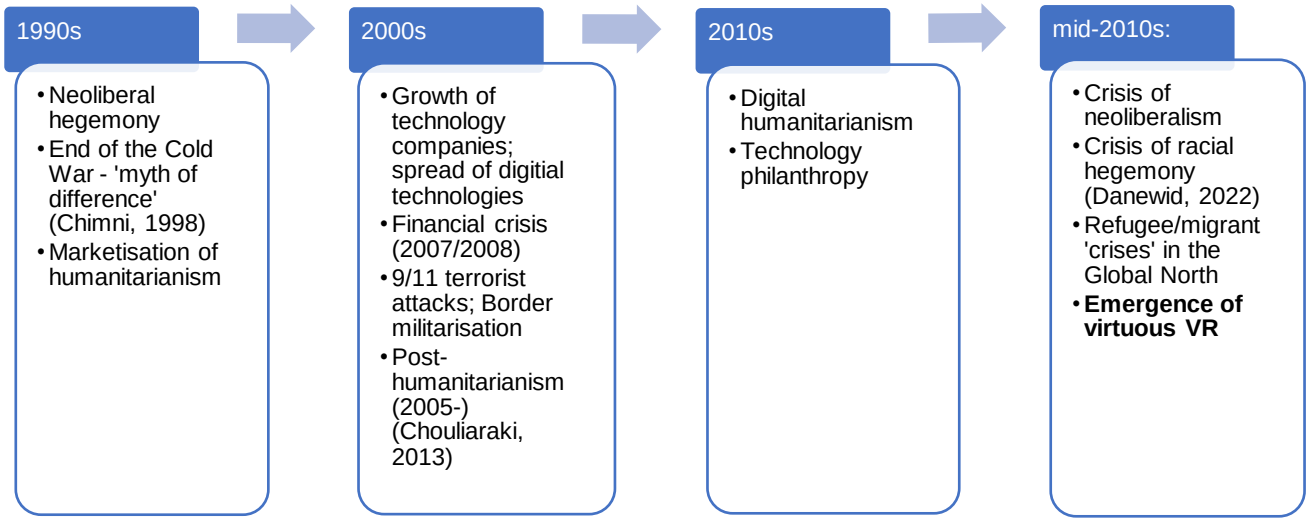
As a piece of technology already embedded in the world and simultaneously attempting to shape it, VR is presented as a tool to make people more empathetic towards refugees and take action on refugee 'crises', while firmly being part of

industries that directly contribute to displacement and violence. Framing VR technology as 'good' is thus part of an active process that justifies further integration into people's lives (Nakamura, 2020). Moreover, as Foxman et al. (2021) argues, the association between VR technology and empathy is "often used within the popular corpus to deepen the institutional norms of specific industries—technologies, journalism, and global advocacy among others—as a new frontier to extend their influence" (p.2182). The relationship between empathy and VR technology, indispensable to its framing as 'good', enables various actors to position themselves as new, captivating, and making a positive difference.

3.8 Conclusion: Virtuous VR in as a response to the crisis of neoliberal capitalism and 'crisis' of migration

This chapter used *Project Syria* as a starting point to analyse the political economy of VR technology, focussing on the economic interests behind the framing of VR as 'virtuous' and who benefits from the association between VR technology an empathy. This chapter therefore sets the scene for the following three chapters that develop my arguments around how the concept of humanity manifests in virtuous VR. Starting with de la Peña's conceptualisation of VR technology as a "visceral empathy generator" and the networks around *Hunger in LA*, I discussed the growing market for VR technology. Given this potential for growth, the framing of VR technology as 'good'—the prime example of which is virtuous VR on displacement and its claims to increase empathy towards refugees—provides a justification for companies to explore new territories for extraction of data and profit-making. I highlighted the historical and deepening entanglement between the border security industry, the arms industry, the military, and VR technology. I also considered the relationship between digital technologies, capitalism, and the modern/colonial world. Here, technology and financial sectors—mentioned in the Introduction as the main winners of neoliberalism (Gilbert and Williams, 2022)—are profiting from the expansion of the border security industry. I then considered contemporary neoliberal capitalism as an expression of a modern/colonial world through the examples of extraction of data and raw materials and environmental destruction, labour exploitation, and coloniality of knowledge and cognitive power.

Figure 9: Virtuous VR in the current conjuncture



Let us now return to Littler's (2016) guiding questions: "What is specific about the moment we inhabit? What common-sense understandings, what economic decisions, power dynamics, what vested interests and collaborative terrains work to shape its contours? What does this constellation of forces look like? How are these power configurations different from before?" Figure 9 summarises my analysis of the current conjuncture in which virtuous VR emerged. As mentioned in the Introduction, by the 1990s, neoliberal capitalism had become hegemonic. 1990s was also when the Cold War ended, which led to the production of 'the myth of difference' (Chimni, 1998), an effect of which was the racialisation of refugees from the Global South as 'non-white' therefore a 'threat' to the Global North (the relevance of which will become clear below); and the increasing marketisation and competition in the humanitarian sector (which eventually leads them to adopt digital technologies and work with technology companies from the 2010s). The 2000s saw the growth of technology companies and the progressive adoption of digital technologies in various areas of society. In the realm of migration, especially after the 11th September terrorist attacks in the US, migration increasingly came to be framed as an issue of security (Innes, 2010; Hammerstad, 2014). Section 3.6 discussed the border-industrial complex, noting the convergence of interests between state actors, technology companies, the arms industry, and the military. Within the hegemonic system of neoliberal capitalism, early 2000s was also a time when post-humanitarianism emerged (Chouliaraki, 2013). As humanitarian actors struggled to survive in the competitive market (Cooley and Ron,

2002), they began to use digital technologies for branding and audience engagement. Humanitarian communication became privatised and self-oriented, centred on the audience's feelings and their own subjective experience (Chouliaraki, 2013, 2021); I consider virtuous VR to be one manifestation of post-humanitarianism.

Following such trends, the 2010s saw the emergence of 'digital humanitarianism' (Meier, 2011; Conneally, 2012), commonly said to have begun in the aftermath of the Haiti earthquake in 2010. Communities affected by the disaster and concerned people around the world utilised digital technologies such as Ushahidi[65], Twitter, Facebook, Skype, and Google Docs for live crisis-mapping to assist with aid efforts (Meier, 2011). Since then, leading humanitarian agencies have adopted or are encouraged to adopt digital technologies (Burns, 2019b), as I outlined in Section 3.5. Burns (2019a, p. 139) uses the term philanthro-capitalism to describe private businesses' provision of financial support, project management, and digital technology services in the humanitarian arena for the purpose of accumulating profit. Philanthro-capitalism emerged in the context of the hegemonic rule of neoliberal capitalism, increasing competition in the humanitarian sphere, the growth of the technology sector, and the uptake of digital technologies by humanitarian actors (Burns, 2019b, 2019a). Technology companies are entering the humanitarian sector through digital humanitarianism to generate profit, and in the process introducing operational logics of branding, efficiency, and bottom lines (Burns, 2019b). They are also propagating the idea that purchasing a commodity is 'doing good', and presenting themselves as 'good' companies. Individual philanthropists like Mark Zuckerberg and Bill Gates, who donate their own wealth to charitable causes, are also important in this dynamic. They exercise "structural leadership" by channelling their wealth to certain issues and organisations, thus impacting on global agenda-setting and international programmes (Partzsch, 2017, p. 10). The following chapters show that journalism and humanitarian sectors are part of this marriage between philanthro-capitalism and digital humanitarianism, as they give credence to technology companies by buying their services and propagating techno-utopian views about virtuous VR. Given the centrality of the concept of humanity to humanitarianism as mentioned in the Introduction, this is why the concept is central in virtuous VR.

[65] This is an open source crowdsourcing platform that enables people to map data.

We then arrive at the mid-2010s, when the culmination of these forces meets the crisis of neoliberal capitalism and the migration/refugee 'crises'. Having survived the financial crisis in 2007/2008, neoliberalism has been facing another crisis since the mid-2010s, of which the Brexit vote and the election of white nationalist Donald Trump are symbolic (Gilbert and Williams, 2022). Many commentators framed those two events as led by economically disenfranchised 'white working class' voters (Mondon and Winter, 2019). This analysis not only contradicts the reality where middle class voters played a key role in Brexit and Trump's victory (Bhambra, 2017a; Mondon and Winter, 2019), but it also privileges whiteness *and* obscures race by framing only 'white' working class people as economically disenfranchised. Scholars who take both race and class seriously instead frame those events in the following way: as groups that had previously enjoyed economic and social privileges (such as the middle class and those racialised as white) began to struggle due to the effects of neoliberal capitalism, nationalist politicians like Trump and pro-Brexit campaigners capitalised on their concerns and anxieties about their shifting material and social positions by instigating anti-migrant/refugee sentiments (Narayan, 2017; Danewid, 2022). As whiteness no longer afford social and material protections—what Du Bois called 'wages of whiteness'—racialised migrants and refugees became the scapegoat (Narayan, 2017; Danewid, 2022). This is the context for the production of refugee/migrant 'crises' in the Global North, specifically Europe and the US. The construction of the movement of certain people as a threat, and the response by governments to manage and prevent such migration, is therefore an attempt to "re-supply the wages of whiteness in the absence of wages" (Narayan, 2017, p. 2491).

The emergence of virtuous VR in this current conjuncture is no accident. On the one hand, refugee 'crises' in the Global North are being used to justify further securitisation of migration and the investment into the border-industrial complex and more broadly the modern/colonial world, of which VR technology is a part as I demonstrated in this chapter. On the other hand, virtuous VR enables the very same actors that are complicit or implicated in the policing of borders and the modern/colonial world to claim to be 'doing good' in response to such migration/refugee 'crises'. Moreover, as a manifestation of post-humanitarianism, virtuous VR encourages feeling differently as a response to injustice (Chun, 2016; Nakamura, 2020). The concept of a generic,

universal humanity plays a key role here, as I show in the following chapters. Emphasising the common humanity between refugees and the users of virtuous VR is too often accepted as 'good', just as empathy is generally understood to be inherently good (Pedwell, 2014). The mobilisation of a generic humanity through virtuous VR erases the structures of power that *specifically* put refugees' lives at risk and question their humanity. By privileging the subjective experience and feelings of the user (Chouliaraki, 2013), virtuous VR reproduces the unequal power relations between refugees and the user even as it purports to 'do good'. Invoking the common humanity of all humans in this context only serves to obscure such structures of power, and reproduce the hierarchy of humanity rooted in modernity/coloniality. This enables users to automatically assume the position of innocence, since virtuous VR frames displacement as something that could potentially happen to anyone—something to which humanity at large is vulnerable—rather than rooted in the global power dynamics that specifically put certain people's lives at risk, and a global system of im/mobility where specific people's movement is policed and securitised (Walia, 2021).

In short, virtuous VR's logic of emphasising a generic, common humanity as a basis for empathy fails to attend to the differential distribution of humanity. This failure is by design, as it serves two purposes. Firstly, it enables actors in the Global North that are complicit or implicated in the production and 'management' of refugee 'crises' to present themselves as doing 'good', thus instrumentalising displacement to manage the crisis of neoliberal capitalism and to justify further investment into VR technology in pursuit of profit. Secondly, and relatedly, virtuous VR sustains the hierarchy of humanity rooted in modernity/coloniality rather than dismantling it, as I show in the following three chapters.

4. *Clouds Over Sidra* (2015): 'Humanisation' and profit-making through virtuous VR

4.1 A glimpse into Za'atari camp

The film begins with the expansive desert, surrounded by giant rocks. As I look around, I notice footmarks and tyre marks on the ground. Someone starts speaking immediately (a narrator speaks English while I faintly hear Sidra's Arabic in the background): "We walked for days crossing the desert into Jordan. The week we left, my kite got stuck in our yard. I wonder if it is still there. I want it back" (*Clouds Over Sidra*, 2016). I am then in a room in the refugee camp; I see a girl sitting on some cushions next to her blue UNICEF backpack. There is a sense of intimacy created as Sidra is sitting opposite me (the camera) and looking at me as she speaks. "My name is Sidra. I am 12 years old. I am in the fifth grade. I am from Syria in Daraa province in Inkhil City. I have lived here in the Za'atari camp in Jordan for the last year and a half." Sidra provides narration throughout the experience. In the next scene, I see Sidra, her father, and her three younger brothers in the same room, and some of them rush outside while the youngest brother cries out and tries to follow them. "I have a big family. Three brothers. One is a baby. He cries a lot. I ask my father if I cried when I was a baby, and he said, I did not. I think I was a stronger baby than my brother."

Figure 10: A desert, *Clouds Over Sidra*



The next scene is of children in the refugee camp walking in a line to school, some of whom look at me (the camera) with curiosity. They form a human train and I can hear their chatter and laughter. “We like to keep our bags and books clean, without rips. It is like a game to see who has the nicest books with no faults in the pages”, Sidra says. Besides them, I see the housing structures in the refugee camp: off-white, all looking exactly the same apart from some with posters and graffiti. “I like cloudy days. I feel like I am under a cover, like a blanket.”

Figure 11: Children walking to school, *Clouds Over Sidra*



I then get a glimpse into their all-girls classroom, as if I’m sitting among them (the camera is positioned to make me feel as if I’m crouched in between the desks). Students have their hands up, enthusiastic to answer the teacher’s question, but then Sidra explains why. “Our teachers sometimes pick students who do not raise their hands to answer. So everybody raises their hand, even if they do not know the answer. But I do my homework and I know the answer if she calls on me.” In the next scene, I am inside a bakery, where I see people baking flatbread in a tandoor oven. “There is a bakery not far from school. The smell of bread on the walk to class drives us mad sometimes.” A man comes to buy bread. I see the man who came to buy bread pointing towards me, perhaps asking what this camera is for.

Figure 12: Students in the classroom, *Clouds Over Sidra*



I am then standing in the middle of the refugee camp, next to a large puddle, where three young children are playing. The ground looks muddy, and I feel the vastness of the refugee camp. There are uniform buildings next to each other as far as I can see. Sidra says, “Some kids don’t go to school. They want to wait until we are back home in Syria. I think it is silly to wait.” I see some children coming back from school, walking past the three children playing around. “How will they remember anything? And there is nothing better to do here anyway.”

Figure 13: Children playing by a puddle, *Clouds Over Sidra*



The next scene is of what looks like an internet café; a narrow room lined up with computers on both sides. There are only boys here, all of whom seem to be playing a game. “Computers give the boys something to do”, Sidra explains. One of them turns to me and starts speaking something about Syria (this is not translated into English). “They say they are playing games but I don’t know what they’re doing because they won’t let girls play on the computers. I don’t understand computer games.” The same boy turns to me again and starts speaking. The boy sitting next to him turns and waves at me, then the two boys shake hands and give each other a kiss on their cheeks. “Our boys.”

Figure 14: Boys playing on computers, *Clouds Over Sidra*



The next scene is in a gym, a large tent with exercising equipment like dumbbells, exercise bike, and pull-up equipment, where I see men exercising and standing around. Sidra comes in with a witty comment: “Many of the men say they exercise because they want to be strong for the journey home. But I think they just like how they look in the mirror. A lot of them make funny sounds when they lift the weights.” The next scene again shows people playing sports, but this time it is boys wrestling. “Younger boys are not allowed in the gym so they wrestle. Or they try to wrestle. Even after everything, boys still like to fight.” Two boys are wrestling in the middle of the mat while the teacher looks on. Other boys are lined up on one side of the mat, cheering on their friends.

Figure 15: Men exercising in the gym, *Clouds Over Sidra*



Girls are playing football in the next scene. “We have to play football quickly because there are so many kids waiting to play. Especially now, unlike home, here in Za’atari girls can play football too. That makes us happy.” There is a lot of talking before one of the girls kicks the ball and the match begins. I then join Sidra’s family having a meal together on a UNHCR mat in a tent. “My mother makes sure we are all together for dinner. I still love her food even if she doesn’t have the spices she used to.” They are sitting in a circle and enjoying the food together. In the next scene, kids are running towards me, shouting, laughing, chatting, holding hands. “There are more kids in Za’atari than others right now. Sometimes I think we are the ones in charge.” I am then back to the room in the second scene with Sidra, who is wiping tears off her face silently. “I think being here for a year and a half has been long enough.”

Figure 16: Girls playing football, *Clouds Over Sidra*



Figure 17: Sidra crying, *Clouds Over Sidra*



The last scene depicts the vastness of the refugee camp and the sky at sunset. The film ends with Sidra's hopeful message of return, which she talks about in relation to the clouds. "I will not be twelve forever and I will not be in Za'atari forever. My teacher says the clouds moving over us also came here from Syria. Someday, the clouds and me are going to turn around and go back home." In the distance I hear birds singing, people chatting, and the rustling of life. A text appears in front of me: "The world is

facing the most devastating refugee crisis since WWII. As of September 2015, the Za'atari camp in Jordan harbors 80,000 Syrians escaping war and famine. No one knows when it will be safe to go home, nor what will be left for them when they return. To help please visit vrse.com/sidra"[66]. The film lasts 8 minute 45 seconds.

Figure 18: Last scene showing Za'atari camp, *Clouds Over Sidra*



Throughout the film, I can look around to get a 360° view. Sounds of everyday life surround me: the rustling of people going about their daily lives, giggles and chatters of children, and the clanking sounds of equipment in the gym. The experience is peculiarly embodied and disembodied; I am constantly aware of the weight of the VR headset and the mild nausea, and yet in the film I do not have a body when I look down. The traces of the camera are erased, giving me a ghostly presence, as if I am playing "the god trick of seeing everything from nowhere" (Haraway, 1988, p. 581). Still, the film itself is clearly a view from somewhere: what is shown within the film was chosen by specific people for particular purposes. My physical presence was made obvious when people spoke to me and looked at me directly, either with curiosity or suspicion, which created cracks in the post-humanitarian attempt to depoliticise the issue of displacement altogether, which I will come back to in Section 4.7.

[66] As of 26th November 2020, the link does not seem to working anymore as Vrse has renamed itself as Within. However, after waiting for a few seconds, a UNICEF donation page to support Syrian children comes up: https://donate.unicefusa.org/page/contribute/help-syrian-children-16078

Figure 19: What I see when I look down as I stand beside Sidra and her family having dinner, *Clouds Over Sidra*



In this chapter, I theorise what I call a 'humanising' approach to displacement and the implications of such an approach. I do this by highlighting the significance of *Clouds Over Sidra* as an example of virtuous VR that has been used by its creators and the World Economic Forum to establish a link between VR technology and empathy. While Chapter 3 considered de la Peña's understanding of the relationship between VR technology and empathy, I use *Clouds Over Sidra* to delve deeper into the relationship between VR technology, empathy, and humanity as creators of *Clouds Over Sidra* explicitly mention humanity in their discussion of the film. For example, it is claimed that VR facilitates a recognition of 'shared humanity' (Arora, 2019). Before analysing two strategies of humanisation, I discuss how virtuous VR has acted as a "gateway drug" (Tarnoff, 2017) to the mainstreaming of VR technology and cultivation of the virtual world as a site for capital accumulation. In particular, among those involved in creating and promoting *Clouds Over Sidra*, I consider how WEF, Samsung, and Vrse (now Within) have benefitted from virtuous VR and the convergence between philanthro-capitalism and digital humanitarianism. The following sections elucidate two strategies of humanisation: mobilisation of the association between universal childhood and innocence, and depoliticisation of displacement via technological disembodiment. The former focuses on representations of refugees, while the latter

focuses on the materiality of the VR technology and how it presents a particular epistemology of displacement. Both of these strategies are used to mobilise a generic humanity to which the user and refugees both belong. The conclusion returns to the question of who benefits from such humanising strategies of virtuous VR on displacement. I suggest that virtuous VR ultimately humanises the modern/colonial order by enabling actors who benefit from this world order to offer a 'solution' to migration that fits within the neoliberal paradigm, while benefiting from the uptake and framing of the technology as 'good' in the process.

4.2 Introduction: 'Humanisation' through virtuous VR

Clouds Over Sidra is the UN's first-ever VR film, released in the aftermath of the 'Syrian refugee crisis' in 2015. Created by the UN Sustainable Development Goals Action Campaign, VR company Vrse, UNICEF Jordan, and Samsung, it tells the story of a 12-year-old Syrian refugee, Sidra, living in Za'atari refugee camp in Jordan. The film has received much acclaim since its release at WEF in Davos in January 2015, where participants 'entered' Za'atari camp through Samsung's VR headsets. The film initially targeted diplomats, policymakers, and donors to bridge the disconnect between 'the powerful' and those who are forced to live the consequences of their decisions. As Gabo Arora, the film's director, the UN's first Creative Director, and the founder of UN Virtual Reality puts it: "I think a lot of these people, even when they would go into Za'atari Camp or someplace like that, it's with an entourage…I just didn't feel like they were really, truly understanding what it's like to walk in someone else's shoes, and I think that all of them need to" (Bierend, 2015). Since its enthusiastic reception in Davos, the film has been made available for the public on Within app as well as YouTube, and has been used in UNICEF's street fundraising efforts (Cravinho, 2016). For those reasons, this chapter focuses on the relationship between empathy and virtuous VR, and more specifically the relationship between the concept of humanity and the figure of children, and the role of organisations like the UN and WEF in promoting virtuous VR as 'good' in the popular imagination.

The supposedly transformative nature of VR films in eliciting empathy is based on their ability to forge a common humanity through the technological affordances of VR such as immersion and presence. Arora (2019) comments that, "Many [users] are often

moved to feel a connection they didn't expect with someone they thought were different from them. *The shared humanity is what moves people the most*" (emphasis mine). The film cultivates empathy as users overcome apparent differences and recognise the common humanity between themselves and refugees. Producer Chris Milk (2015) makes a similar remark: "You feel her [Sidra's] humanity in a deeper way. You empathise with her in a deeper way….[VR is] a machine, but through this machine we become more compassionate, we become more empathetic, and we become more connected. And ultimately, we become more human" (Milk, 2015). Their comments share similarities with de la Peña's comments (Chapter 3) about the VR's technological affordances of perspective-taking leading to greater understanding and empathy, including the thought that 'this [displacement] could happen to me too'. *Clouds Over Sidra* is a quintessential example of virtuous VR; Arora and Milk discuss VR technology as uniquely positioned to cultivate users' empathy towards refugees through recognition of a common humanity. This common humanity—recognition that refugees are fellow human beings despite apparent differences—cultivated through virtuous VR serves as the basis for empathy, which Arora describes as "walking in someone else's shoes" (Bierend, 2015). This does not mean that the user is embodying a refugee girl like Sidra in the virtual environment as is the case for 'prosocial change for people' (the user embodying someone else in the virtual environment) (Foxman et al., 2021). Arora's description is, again, closer to de la Pena's understanding of the relationship between VR technology and empathy in the form of 'prosocial change for place' (transporting the user to somewhere unfamiliar to them to feel closer to the issue at hand) (ibid.), which facilitates a recognition of a common humanity by "letting viewers live in the worlds they see, even only for a few moments" (Arora and Jones, 2017).

Arora and Milk have served as outspoken advocates on the power of VR technology to change the world for the better by making people more empathetic. Empathy is posited as an affective relation that necessarily leads to the betterment of society, rather than functioning within transnational relations of power (Pedwell, 2014). As Turner (2020) asserts in relation to the role of portrait photography in mediating who is considered a 'good migrant' in the UK, there is an assumption that "if only northern publics could *see* migrants as *equally* human – or more precisely, as individuals and people – they could emphasise with their plight" (p.202; italics original). The ways in

which Milk and Arora talk about the power of *Clouds Over Sidra* resonate with an understanding of 'humanising' refugees as a recognition of refugees as people *like us*, or equally human like us. This is the "shared humanity" in Arora's (2019) comments. I characterise such an approach to displacement as a 'humanising' strategy that seeks to challenge anti-refugee representations. *Clouds Over Sidra* attempts to challenge 'dehumanising' representations and treatments of refugees by encouraging a recognition of a common humanity to which the user and refugees both belong. This ostensibly enables the user to imagine "what happens to these unfortunate people could also occur to our kids" (Arora and Jones, 2017).

Humanisation as it manifests in *Clouds Over Sidra* comprises three elements. Firstly, it entails recognising refugees as a 'fellow human being', as part of a common humanity. Here, humanity is invoked as a collective subject (Introduction). Secondly, this invocation of humanity as a collective subject, and interpellation of the user as belonging to humanity in the same way as refugees, is assumed to generate affinity towards refugees. Common humanity is assumed to lead to empathy, and empathy is assumed to be inherently good. Thirdly, I argue that this understanding of humanisation is based on a logic of inclusion, whereby one is letting in—or 'welcoming', to use a language more commonly used in relation to refugees—'the other'. As I explore in Section 4.8, this logic of inclusion is predicated on unequal power relations, since one will always have power over others to make decisions and to draw boundaries around and within 'humanity'.

It is worth briefly returning to the discussion in the Introduction about the entanglements between the category of the human, modernity/coloniality, and refugees that decolonial theory highlights. Through *Clouds Over Sidra*, I show that inclusion into a shared, generic humanity means assimilation into a colonial and racialised human, rather than a disruption of this logic. In his analysis of 'humanising' through portrait photography, Turner (2020) writes that the reliance on the 'human face' reproduces colonial bordering as it presents migration as a universal condition (rather than shaped by imperial and colonial histories) and assumes that the humanity of migrants must be proven through an emphasis on their 'contributions' to society.

In this chapter, I also offer a critique of 'humanising' approach to displacement using

two examples. I identify two strategies of humanisation in *Clouds Over Sidra*: mobilisation of the association between universal childhood and innocence, and depoliticisation of displacement via technological disembodiment. Using those strategies, I show that humanisation based on a logic of inclusion cannot be a basis for a truly liberatory politics as it does not dismantle the conditions that require humanisation in the first place. Questioning the underlying premises and conditions that call for humanisation is important because strategies of humanisation are often unquestioningly framed as countering dehumanising narratives and depictions of refugees (Fiddian-Qasmiyeh, 2017). As Fanon (2008) pointed out in his theorisation of blackness, whiteness, and humanity, Black people are made to question their status as human beings because their status as human is suspect in a world based on a colonial, racial classification of humanity—and in this context, humanisation may simply mean being incorporated into the dominant genre of the human. Wynter (2003) used the expression 'genres' of the human to refer to how the supposedly universal conception of human is often an overrepresentation of a particular conception of the human, i.e. white, middle/upper-class, (cis)man. Other genres of the human that do not fit into this way of being are disavowed. Coloniality of being (human) is thus intrinsically bound up with modernity, which "assumes a linearity—that one perfects *what it means to be human* in a linear fashion" (Walcott, 2021, p. 3; emphasis original).

4.3 Capital accumulation through 'the ultimate empathy machine'

Before examining the two strategies of humanisation, I discuss how *Clouds Over Sidra* fits into the political economy of VR that Chapter 3 considered. As mentioned in the Introduction and Chapter 3, the World Economic Forum has played a major role in the push for virtuous VR. Since its establishment in 1971, WEF has played a key role in neoliberal capitalism. Over two decades ago, Robinson and Harris wrote of the organisation as "the most comprehensive transnational planning body of the TCC [transnational capitalist class] and the quintessential example of a truly global network binding together the TCC in a transnational civil society" (2000, p. 30). WEF is one of the most powerful "private international policy groups" (Carroll and Carson, 2006, p. 53) that brings together public and private sectors: CEOs, media groups, policymakers and government officials, select academics and experts, who gather to set agendas and build a world favourable to neoliberal capitalism. Since its establishment, WEF

has also come to play a significant role in a range of 'social issues' offering "technocratic and economistic approach to governing global issues" (Elias, 2013, p. 153), many of which fall within the remit of humanitarianism and development (Carroll and Carson, 2006, p. 58; Elias, 2013; Mann, 2018; World Economic Forum, 2022). It is therefore a mistake to contrast WEF's push for VR technology as one that is "for public good" against corporate interest in the technology for profit-making, as the Time article does (Chow, 2023). They share the same interest. WEF is comprised of "a highly elite core of transnational capitalists" (Carroll and Carson, 2006, p. 58), funded by "1,000 of the world's foremost corporations" (World Economic Forum, no date a). Roughly 73% of WEF's funding came from membership and partnership fees in financial year 2021/2022[67].

In this context, WEF's interest and investment into VR technology, including virtuous VR such as *Clouds Over Sidra*, might be understood as part of this broader agenda to cultivate new territories (the virtual world) for data extraction and capital accumulation (Couldry and Mejias, 2019; Zuboff, 2019). This reflects the increasing convergence of humanitarianism and philanthro-capitalism under neoliberalism (Burns, 2019b; Barnett, 2023). Of course, even when the cause is 'humanitarian', involvement must make business sense for private sector actors (Mann, 2018, p. 10). It is, then, significant that WEF has been invested in VR technology from its nascent stage (Chapter 3). *Clouds Over Sidra* was one of the first virtuous VR to be given a spotlight at WEF after *Project Syria*. Milk and Arora also contributed an article titled 'How virtual reality makes the world a better place' to WEF's website in 2015, writing that their goal is "to make virtual reality a catalyst for real-world change" (Milk and Arora, 2015). In 2019, WEF and the UN announced a strategic partnership, focussing on six key areas (financing, climate change, health, digital cooperation, gender equality and empowerment of women, and education and skills) from the UN's 2030 Agenda for Sustainable Development (World Economic Forum and United Nations, 2019). Rightly, this move has been criticised by organisations who see this as an expansion of 'public-private partnership' that

[67] Forum membership is by invitation only, and membership and partnership fees range from CHF 60,000 to CHF 600,000 (roughly £53,000 to £533,000) "depending on the level of engagement" (Cann, 2017). Non-corporate participants (civil society organisations, the arts, youth leaders, media, head of state and ministers) do not pay to participate in the annual meeting.

privileges “market-based profit-making ‘solutions’ to global problems” (The Transnational Institute, 2019) in the realm of humanitarianism that is already being marketised through the increasing entry of technology companies (Madianou, 2019). Seen in this context, virtuous VR on displacement is not only beneficial for Big Tech[68] and digital industries as Nakamura writes (2020). Virtuous VR instrumentalises the issue of displacement by providing an entry point for corporations to generate profit in the name of ‘doing good’ as philanthro-capitalism and digital humanitarianism increasingly converge (Burns, 2019a, 2019b). As an early and high profile piece of virtuous VR on displacement that established the VR as ‘the ultimate empathy machine’ (Milk, 2015), *Clouds Over Sidra* laid the foundation for more recent initiatives by WEF such as ‘Defining and Building the Metaverse’ (2022) that brings together over 100 academics, civil society organisations, government agencies, and corporations to realise the ‘metaverse’, and the creation of “Global Collaboration Village” in collaboration with Microsoft and Accenture.

Since the release of the film, Samsung and Vrse have had contrasting experiences in the VR industry. Although Samsung provided Samsung Gear VR headsets for the premiere of the film, it discontinued its VR headset and applications in 2020. Because Samsung’s headset was smartphone-powered, it could not compete against standalone headsets that do not require smartphones (such as Meta’s headsets). In 2023, Samsung is seeking to re-enter the VR/AR/XR market through a partnership with Google and semiconductor developer and manufacturer Qualcomm to create a Mixed Reality platform, though details remain sparse (Kharpal, 2023). On the other hand, Vrse (now known as Within) has made more straightforwardly successful headway into the VR market after the release of the film by settling on a profitable business. Within has created a variety of immersive experiences over the years but now exclusively focuses on Supernatural, a subscription-based[69] VR fitness app on Oculus Quest platform. Launched in April 2020, Supernatural is an app where people can meditate, box, or have a full-body workout to playlists and coaches of their choice, and in various scenic locations around the world. Supernatural also has a Facebook

[68] This typically refers to dominant technology companies headquartered in the US, such as Google, Amazon, Meta, and Apple.

[69] As of March 2023, it costs $19.99 per month.

community[70], where people share their experiences, offer encouragement, and ask questions. One day after Facebook announced its new name Meta (29th October 2021), it announced its acquisition of Within (Rubin, 2023). In July 2022, the US Federal Trade Commission sued Meta to block the acquisition on antitrust grounds, but the judge ruled in favour of Meta in February 2023, allowing it to proceed with the acquisition (CBS News Bay Area, 2023). Since its rebranding as Meta, the company has been investing heavily in gaming and VR production companies, and has acquired nine VR production and gaming companies[71] between 2019 and 2022. The gaming industry is seen as an area leading the mass adoption of VR, with Accenture writing in a report produced with WEF that the "gaming industry has essentially moulded users for the metaverse and will continue to lead and help support development [of the metaverse] in perpetuity" (Kuang *et al.*, 2023, p. 13).

Where Meta and Within particularly converge on is the emphasis on VR technology's ability to connect people (Milk, 2021; Rubin, 2023). Milk's vision is that VR will soon become one way for people to share experiences with others, especially people they are close with (Milk, 2021). This emphasis on shared experience due to immersion and the ability of VR to connect people draws on the discourses that various actors identified in this thesis have attempted to embed through virtuous VR. Tarnoff (2017) points out that VR offers a way for technology companies to "rehabilitate the idea that connectivity produces socially beneficial outcomes…that Silicon Valley is an essentially humanitarian enterprise." Virtuous VR has played this role particularly well through its association with humanitarian organisations like the UN and NGOs.

Within has managed to establish a VR business while companies in other areas struggle to monetise the technology (such as immersive journalism discussed in Chapter 5). Connected fitness[72] is a rapidly growing market especially since the pandemic when working out at home became the norm for many people. Milk (2021)

[70] It can be accessed via this link: https://www.facebook.com/groups/getsupernatural

[71] Those are Beat Games, Sanzaru Games, Ready at Dawn, Downpour, Unit 3 Games, BigBox VR, Twisted Pixel Games, Armature Studio, and Camouflaj.

[72] This refers to exercise and workout programmes, trackers, and equipment powered by digital technology that users can use at home.

has described fitness as “the killer use case for VR”, and that it “will be the first driving force of mass adoption through normal consumer audience” by providing a solution to the problem of wanting or needing to exercise but not being able to for a variety of reasons. By combining entertainment with fitness, connected fitness services provide motivation, a community, and fun on top of the main purpose of keeping fit. Alongside gaming, connected fitness may become one of the areas in which VR technology becomes part of everyday life, which is what those invested in the metaverse is striving for.

Taking those discussions into account, humanisation of refugees as it manifests in *Clouds Over Sidra*, to which the next sections turn, plays a key role in the framing of VR technology as ‘the ultimate empathy machine’. A humanising approach to displacement that reproduces the modern/colonial hierarchy of human means that, on the one hand, those involved in this project can present themselves as (doing) good; on the other hand, they are preserving the status quo by both mobilising a genre of the human that underpins the current world order and by generating profit in the process.

4.4 Centrality of young children: Feminised childhood, innocence, and humanity

Figure 20: Girls playing football (Sidra in the middle), and laundry hanging in the background, *Clouds Over Sidra*



Clouds Over Sidra consists of "a series of ordinary moments" (Bailenson, 2018, p. 77), and there is no dramatic narrative arc or explicitly emotive scenes. The film is driven by Sidra's own narrative, in contrast to *Sea Prayer* (Chapter 6) in which the user only encounters the child through the father's perspective. In an attempt to counter representations of refugees as an anonymous mass stripped of individuality and agency, the film focuses on a girl who speaks her mind and expresses her individuality.[73] Sidra's narration plays a significant role in creating a sense of her daily life in Za'atari, which contributes to the senses of ordinariness and tragedy that the creators wanted to generate. They wanted to produce "a situation that looks 'ordinary' yet is disturbed by details that with sobriety remind us [the user] of tragedy" to cultivate "empathy stemming from real understanding" (Arora and Jones, 2017). For example, Sidra's witty comments in the scenes in the gym and the classroom give an insider view of life in the camp through her eyes, emphasising that 'life goes on' in the camp.

There are fleeting moments of faint familiarity for the imagined user in the Global North: children going to school and playing sports while parents and teachers watch over them; glimpses of domestic life, like laundry hanging to dry; people chatting at the bakery; boys playing computer games. And yet, those ordinary moments coexist alongside blue UNICEF and UNHCR logos on Sidra's bag and tents, and barbed wire surrounding the school compound. The user is confronted with the vastness of the camp, juxtaposed with Sidra's hopeful message of return to Syria towards the end of the film. *Clouds Over Sidra* therefore attempts to create fragments of familiarity through Sidra's narrative and depictions of daily life in Za'atari, which are disrupted by the constant reminder that this is life in a refugee camp. Sense of ordinariness is invoked so that users can imagine what has happened to Sidra and other refugees could also happen to the user or their children (Arora and Jones, 2017).

[73] Apart from the factors related to children and humanity that I discuss in this chapter, the decision to focus on an individual child may be due to the 'identifiable victim effect' (IVE) mentioned in the Introduction.

Figure 21: Sidra speaking to the camera, *Clouds Over Sidra*



The choice to use a 12-year-old girl as the protagonist of the film as well as the prominence of children perpetuates the well-established representational trope in the humanitarian imaginary that affixes refugees to the idea of feminised and infantilised humanity (Burman, 1994; Johnson, 2011). In this sense, although *Clouds Over Sidra* purports to be transformative in its approach to displacement and representations of refugees, it recycles old and oft-critiqued representational tropes. The prominence of children is a common feature of the UN's virtual reality films. Gruenewald and Witteborn (2020) found that 17 out of the 20 films on the UNVR website feature children or women, with only one film featuring an adult man as a narrator and none featuring a male protagonist (p.6). Continuing the feminisation and infantilisation of refugeehood that construct refugees as docile recipients of humanitarian assistance, *Clouds Over Sidra* draws on two representational tropes: a girl refugee and young children, both of whom evoke the association between humanity and children. This section considers the relationship between humanity, innocence, and children, linking to the discussion about humanity, future, and children in Chapter 6.

According to Ticktin (2020), innocence plays a central role in humanity, where it works as a 'boundary concept' that delimits the conceptual boundary of humanity. For example, innocence can mean someone is not corrupt, or not yet fully human due to lacking reason, will, or autonomy (Ticktin, 2020, p. 186). Innocence can be understood either as "an essential identity" (who someone is, as the association between childhood and innocence) or as "an act" (what one has done, for example when someone engages in criminalised behaviour) (Ticktin, 2020, p. 186). As a boundary concept, innocence is a constantly expanding space of purity juxtaposed with a space of contamination (Ticktin, 2017). Importantly, as a space of purity, innocence is placed outside of history and it also obscures the political and historical contexts that create those 'victims' in the first place (Ticktin, 2020, p. 190). Because of this, innocence works both ways. The 'victims' are positioned within the boundary concept of innocence (e.g. not yet corrupt or fully human), but the 'saviours' are also positioned as innocent: as people who simply know more or have the power to help, rather than those who are (also) implicated in the conditions that create 'victims' in the first place.

Children as understood in humanitarianism are a quintessential example of innocence, as they embody a space of purity prior to being corrupted by social norms. However, the association between innocence and children is a modern invention, and is shaped by various factors such as race, class, and gender (Burman, 1994). The association between children and innocence is therefore not about age or a particular definition of 'childhood' per se (Ticktin, 2020, p. 189). In short, there are various childhoods (Carpi and Diana, 2019, p. 137). A variety of factors influence whether a child is seen as innocent, or whether one can even be considered a child in the first place. Innocence, then, shapes the affective relations between 'I' and 'refugees', how one may feel 'about' refugees in the first place before they feel 'with' or 'for' them (Ahmed, 2014).

An illustrative example of how the association between innocence and childhood has been mobilised in relation to refugees is the debate about unaccompanied child asylum-seekers stranded in Europe joining their relatives in the UK under the legislation 'Dubs amendment'[74] passed in 2016. Lord Dubs, who advocated for the

[74] Section 67 of the Immigration Act 2016 was amended after campaigning led by Lord Dubs. This

amendment fled the Nazis as a child, using the Kindertransport scheme which helped children to leave Nazi Germany. McLaughlin (2018) identifies two campaigning strategies used by Lord Dubs: suffering of innocent children, and the historical parallels between the Kindertransport scheme in the 1930s to highlight Britain's proud history of helping child asylum seekers. Both strategies position the British state as a saviour and "substitute parents" of unaccompanied child refugees (McLaughlin, 2018, p. 1762). Shortly after the announcement of the scheme, photographs of child asylum seekers clearly showing their faces were printed in national newspapers, accompanied by questions about whether they were 'really' children (BBC News, 2016b; McLaughlin, 2018; Abbas, 2019). Jacob Rees-Mogg, a Conservative Member of the Parliament (MP) in the UK, even asserted that "older migrants are reported to be pushing children out of the way", and that the current policy was making the public worried about whether "it is genuinely children that are being rescued" (BBC News, 2016b). Another conservative MP David Davies called for the introduction of mandatory dental checks, which the British Dental Association (and ultimately the government) opposed saying that they are unethical as well as inaccurate as a means of determining someone's age.[75]

Abbas (2019) argues that the debate surrounding the admittance of child refugees from countries like Syria and Afghanistan framed male Muslim child refugees as "man-child", who poses as children to deceptively enter the UK. The figure of the man-child plays into racialised tropes of 'deceitful Arab people', and its indeterminacy is used to position refugees as opportunistic migrants threatening the 'white working class'[76] and the British welfare state (Abbas, 2019). As demonstrated by Rees-Mogg's comment, the difficulties in determining who is a 'genuine' refugee are used to justify unethical

amendment committed the UK government to resettle 480 unaccompanied asylum-seeking children in Europe (UK Visas and Immigration, 2020). All 480 places have been taken up and the scheme ended in 2020 (Bulman, 2020).

[75] Drawing on such suspicions of child asylum seekers, the Nationality and Borders Act (2022) established the National Age Assessment Board (accountable to the Home Office), which takes referrals from local authorities to conduct age assessments.

[76] See Shilliam (2018) for an analysis of how the category of the 'white working class' reflects elites' production of undeserving/deserving dichotomy for the purpose of political domination. He argues that 'white working class' entered the British political lexicon after the financial crisis of 2007/2008.

screening practices. Whether someone is a child according to the age assessment standards and norms in the UK thus defined who was deserving of being 'welcomed' and treated as a human being (Abbas, 2019, p. 2463). The indeterminacy of the figure of the man-child blurs the boundaries of innocence and normative childhood. The British state was no longer the saviour or the substitute parent of innocent children, but under threat (McLaughlin, 2018). The suggestion to screen who is a 'real' child refugee was thus an attempt to clarify the limit of innocence as well as humanity, and ultimately to determine who was deserving of accessing means of existence.

Using Sidra and young children throughout the film, *Clouds Over Sidra* attempts to mobilise the association between children, humanity, and innocence. In so doing, it attempts to create a space of purity devoid of politics. Apart from Sidra who is present in all scenes through her narration and appearance, 11 out of the 15 scenes put children at the centre. It is telling that the scene where a group of children run towards and encircle me is a scene that Arora wanted to portray so much that he orchestrated it: "Of all the scenes, I staged one. The one with the kids running at you and encircling you in slow motion? I herded about 200 kids. I was like the pied piper. We did that and made a game of running and playing for four hours" (Arora, 2015). This gesture of children encircling the user is symbolic of peace and hope—what Malkki (2010) describes as 'infantilisation of peace'. Through their association with world harmony and peace, children in the film appear as 'educators' of adults embroiled in the politics of war and displacement.

Figure 22: Children running towards me and forming a circle around me, *Clouds Over Sidra*



Moreover, Al-Ghazzi (2019) points out that the prominence of children in the reporting on the Syrian conflict in the Global North is due to their 'visual familiarity' compared with Syrian adults who are "racially and culturally marked as Arab Muslims" (Al-Ghazzi, 2019, p. 3227). This links to the aforementioned discussion about the boundaries of childhood and innocence as well as the ways in which Muslim refugee men are racialised in relation to modernity/coloniality. As Muslims are positioned as the constitutive outside of Europeanness and modernity, and therefore as fundamentally threatening to Europeanness (Abbas, 2019), Muslim men are not compatible with the figures of children that denote innocent humanity. Where men in Za'atari do appear, it is through the 'ordinariness' of their activities: boys playing computer games in an internet café, Sidra's father having dinner with his family, men working in the bakery, men exercising in the makeshift gym, and boys wrestling. Men in Za'atari are a backdrop to Sidra's life in the camp, rather than taking centre stage as they do in *Refugees* (Chapter 5). Even as the racialised figures of Muslim refugee men threaten the boundaries of childhood and innocence, the relationship between modernity/coloniality, Islam, and gender play out through the figure of a Muslim refugee girl. Sidra, who is wearing a hijab, represents the figure of a feminised and veiled refugee, reproducing conventional representations of Muslim women as vulnerable and docile victims in need of rescue (Abu-Lughod, 2002). In this sense, the relationship between refugee children, innocence, feminisation, and humanity produces a particular genre of the human in relation to refugees that is ostensibly more conducive to mobilising the impetus to help.

4.5 Universal childhood: Restoring 'lost' childhood

The association between children, innocence, and humanity is part of an idea of universal childhood, which forms a key backdrop to the prominence of children in *Clouds Over Sidra*. In humanitarian representations and campaigning for refugees, particular versions of childhood are universalised and standardised. The idea of childhood as inherently tied to concepts of innocence and vulnerability, or as a universal stage in life that should be enjoyed, are specific to 'the West'[77] and are produced by certain actors (Burman, 1994; McLaughlin, 2018; Carpi and Diana, 2019). For example, Schaub, Henck, and Baker (2017) traced how the understanding of childhood had shifted in the period 1946-2010 through an analysis of UNICEF policy documents. They argue that the documents reflect a shift from providing "aid to children in specific national and regional contexts to a universal construction of childhood development considered essential for all children" (p.307). By the end of the 20th century, what they call "the globalized whole child"[78] (p.301) had become the dominant understanding by UNICEF; in this understanding, childhood is a life stage to which every child is entitled. Scholars have provided critical discussions of NGO's humanitarian programmes for Syrian children based on this idea of universal childhood. For example, in their analysis of Canadian NGO Right to Play's programme for local and Syrian refugee children in Lebanon, Carpi and Diana (2019) underscore the ways in which the assumption of universal childhood (children as vulnerable and in need of rescue by NGOs) leads to the dismissal of children as socio-political actors. They argue that NGO programmes related to play, including sports for children, focus on changing the subjectivities of children based on the universal idea of childhood, rather than engaging with the political and historical factors that lead to various activities that put children at risk, such as recruitment into armed groups, sexual exploitation, organised begging, and trafficking.

[77] 'The West' is a discourse (a system of representation) that creates a dichotomy between the West and the Rest, with the former referring to "a society that is developed, industrialized, urbanized, capitalist, secular, and modern" (Hall, 2019b, p. 142). In this instance, it refers to the Euro-American context.

[78] This reflects the adaptation of the UN Convention on the Rights of the Child in 1989 and the World Summit for Children in 1990. The idea of the whole child understands childhood as a holistic life stage comprised of physical, cognitive, and psychological aspects (Schaub, Henck and Baker, 2017, p. 316). With the adoption of the UN Convention, children also officially became the bearer of individual rights.

An apolitical and universalised idea of childhood is also at work in Za'atari itself. Based on fieldwork in Za'atari and interviews with Save the Children workers and Syrian refugee children, Gatter (2017) examines how humanitarian practices attempt to restore the 'lost' childhoods of refugee children by "adjusting the ongoing present (displacement in Za'tari) to make up for the past (lost childhood in Syria) and prepare for the future (rebuilding Syria)" (Gatter, 2017, p. 91). Moreover, Gatter (2017) asserts that the attempt to restore childhood involves encouraging children to think about returning to Syria in an abstract and apolitical way. Even though the camp environment provides children with the freedom to navigate the space on their own accord and to develop their sense of agency to a certain extent, NGO programmes prioritise developing children's capabilities that can be utilised upon their future return to Syria, rather than also in their immediate context (Jordan). Because of this, NGOs engage with children's hopes for return to Syria insofar as thinking about this encourages them to be positive and forward-looking. In this process, children's pasts in Syria, and their hopes to return to Syria, are flattened out in the name of political neutrality (Gatter, 2017).

The idea of universal childhood is also present in *Clouds Over Sidra*. The film appeals to the idea of restoring 'lost' childhood under 'abnormal' circumstances of living in a refugee camp through depictions of Sidra's daily life in the camp juxtaposed with the constant reminders of its 'abnormality'. Even though children in the film appear to be leading their daily life in the camp by going to school, playing with their friends, wrestling or playing computer games and football, Sidra's narration and some of the scenes remind the user of the different ways in which children cope with experiences of displacement. In a scene where I see three young children playing next to a large puddle in front of me, Sidra's narration communicates refugee children's sense of temporality: while some children wait for their return to Syria to start going to school, Sidra thinks it is "silly" to wait. The main message here is that the refugee children's childhood is being lost, and children are coping with their lost childhoods in different ways. Some wait, while others like Sidra try to accept her new life in the camp and do the best she can. However, the way in which Sidra understands return to Syria is abstract in the way Gatter (2017) discusses. At the end, Sidra ponders in a scene depicting the vastness of the camp at sunset: "I will not be twelve forever and I will not

be in Za'atari forever. My teacher says the clouds moving over us also came here from Syria. Someday, the clouds and me are going to turn around and go back home." This abstract hope for return aligns with the idea of universal childhood that is mobilised in humanitarianism, of which UNHCR is a part. The message of abstract return to 'home' and universal childhood appeal to the intended audience in the Global North to take action (Gruenewald and Witteborn, 2020, p. 12) and to feel for refugee children.

Although *Clouds Over Sidra* is different from oft-criticised representations of child refugees who do not speak at all and are usually depicted as suffering victims (Johnson, 2011), the figures of children in the film reproduce particular notions of what childhood means. It is therefore the association between innocence, humanity, and universal childhood that undergirds a humanising approach to displacement. The common humanity that *Clouds Over Sidra* seeks to make the users recognise is based on an understanding of humanity that relies on a space of purity (innocence) and on a particular genre of the child/human. In the next chapter (Chapter 5), I discuss the how young refugee men tend to be the victims of politics of deservingness linked to the idea of children, innocence, and vulnerability. The figure of the universal child will always be limiting, because innocence produces hierarchies within humanity as it perpetually seeks to establish a space of purity (Ticktin, 2020). It therefore cannot serve as a basis for a politics that supports *all* refugees. Figures of the universal child may be more likely to galvanise empathy, but it fails to engage with the more fundamental mechanism of "border control on *all* undocumented non-citizens" (McLaughlin, 2018, p. 1767; emphasis mine).

4.6 The body as a container: Dis/embodiment in VR

Another way in which humanisation operates in *Clouds Over Sidra* is through what I call technological disembodiment. As mentioned before, the unique selling point of VR is that it is a technology that offers visceral, embodied experiences that other forms of media cannot. This technological affordance is used to frame VR as an 'empathy machine'. Within this techno-utopian discourse about virtuous VR, dis/embodiment plays an important role. For instance, in a highly cited paper, Kilteni, Groten and Slater (2012) propose the term "Sense of Embodiment" to describe embodiment in VR, defined as "the sense that emerges when B's [a body's] properties are processed as

if they were the properties of one's own biological body" (p. 375). Embodiment thus generates a sense of "personally having the VR experience" (Shin, 2018, p. 66), and VR experiences are "often better understood not as a media experience, but as an actual experience" because they feel "real" (Bailenson, 2018, p. 46). Nash (2018) also describes VR as a technology of simulation rather than representation. What I want to highlight is Kilteni et al.'s (2012) footnote where they state that they use the term 'body' "as a container, which can be any object in the context of virtual reality", which is distinguished from "one's biological body" (p.375). The "body as a container" suggests that it can be filled up and emptied at will. The authors similarly define "sense of embodiment" as "the ensemble of sensations that arise in conjunction with *being inside, having, and controlling a body*" (pp.374-375, emphasis mine). The physical body and virtual body are thus understood as a container that holds something else: they are individualised and rendered as property, something you *have* rather than something you *are* (Minh-ha, 1989).

The conceptualisation and operationalisation of the body as a container underscores an interesting tension: although VR technology is an embodied form of technology as it relies on embodiment to achieve its technological affordances (Hayles, 1996), embodiment in the virtual environment is predominantly[79] achieved through supposed transcendence of the physical body. This idea that VR technology enables "bodily and subjective transcendence" (Green, 1999, p.416) extends the discourses in the 1980s and 1990s when the technology was being developed. More specifically with regard to VR films on displacement, the viewer can ostensibly stand in the shoes of refugees or experience what it is like in a refugee camp, precisely because the body is seen as a container. Refugees' bodies, through which they experience displacement, are rendered consumable and replaceable (Cañas, 2016). This is connected but different from the "identity tourism" from the early internet era (Nakamura, 1995): in addition to users embodying "exotic, racialised and gendered avatars" at will, they are encouraged to conflate this VR experience with the actual experiences of those who

[79] As pointed out by Wallis and Ross (2021, p. 317), Indigenous creators and scholars such as Métis Cree film director Loretta Todd and Kanien'kehá:ka (Mohawk) artist and theorist Jackson 2bears have challenged Eurocentric emphasis on disembodiment in VR. They have sought to use VR technology in ways that centre the body and differently embodied selves that people bring to the VR experience.

experience displacement (Nakamura, 2020, p. 54). The ease with which users move in and out of such virtual environments is especially ironic given the restrictions placed on the mobility of the people depicted in virtuous VR on displacement (ibid.). Indeed, one can claim to be able to simulate displacement in a virtual environment only if displacement is reducible to an instance, a scene—rather than a historical and political experience rooted in a racist and colonial ordering of mobility on a global scale. Therefore, in the process of transposing experiences to the body-as-container in the virtual world, the experiences of displacement are divorced from refugees' lives: decontextualised, generalised, and depoliticised.

The way in which virtuous VR on displacement works through dis/embodiment generates a particular epistemology of displacement. As mentioned in the Introduction, media not only transport information but also transform human relations and engagements with the world in the process of this transportation (McLuhan, 2013; Towns, 2022). In this case, VR transforms the relationship between the user and refugees, and also makes possible particular ways of knowing displacement. In the next section, I connect the erasure of the user's body in *Clouds Over Sidra* to an underlying assumption about the concept of humanity that Arora and Milk discuss. Technological disembodiment reflects an assumption about the concept of humanity and universal embodiment that undergird the techno-optimistic framing of virtuous VR on displacement: that because we are all embodied human beings, the virtual body-as-container serves as a vehicle through which to experience and understand other people's lives and experiences. The idea of body-as-container and an apolitical, pre-existing idea of humanity together produce a disembodied and apolitical epistemology of displacement that elides questions of power and politics, as if we are all equally vulnerable to being displaced (Suzuki, 2022).

4.7 Depoliticisation of displacement via technological disembodiment

Clouds Over Sidra presents a curious juxtaposition. I was intensely aware of my body due to the nausea and the weight of the headset, and yet I do not have a body when I look down. The cameras are erased from the video. I only see traces of this erasure, a smudged ground, when I look down. I argue that this erasure of the body, or technological disembodiment, is symptomatic of an assumption behind the film: that

humanisation is made possible through an erasure of difference and power relations. It is important to note that technological disembodiment is not all-consuming. For example, there are moments in the film where I became aware of my body through the people in the film looking back at me (the camera) as mentioned at the beginning of this chapter, prompting me to consider ethical questions regarding filming refugees, and my presence as a voyeur. Despite the potential for such moments of reflection, I discuss below implications of the intentional erasure of the body.

The erasure of the body provides a supposedly neutral standpoint from which to enter Sidra's world, facilitating 'felt truth' (Pedwell, 2014). VR films are said to afford access to a privileged form of knowledge, derived from experiencing what it is like to live in a refugee camp rather than simply watching or reading about it. I challenge this collapse between knowledge and experience by drawing on the insights of postcolonial and Black feminist scholars (Combahee River Collective, 1977; Collins, 1991, 1999; Mohanty, 2003).

Given the contested relationship between ontology and epistemology in feminist activism and scholarship (Hemmings, 2012), feminist literature on these themes are helpful in teasing out some of the assumptions and tensions in claims about 'felt truth' and VR films. Postcolonial and Black feminist scholarship deconstruct the category of 'woman' and offer ways of understanding the relationship between ontology and epistemology as a basis for a politics of liberation. For example, challenging some feminist scholars' universalisation of white women's experiences in 'the West', Mohanty (2003) advocates for a 'politics of location', as opposed to a 'politics of transcendence', whereby experience itself is understood to be mediated by power structures. Experience, therefore, "must be historically interpreted and theorized if it is to become the basis of feminist solidarity and struggle" (Mohanty, 2003, p. 122). Much like the sociality of emotion model (Ahmed, 2014), experience is thus not something a pre-existing, atomised subject has; it cannot be separated from the wider context in which a person is socially located, and the power relations in which they are implicated (Stone-Mediatore, 1998; Mohanty, 2003). In this sense, contrary to the assumption behind virtuous VR, experiences are mediated both inside and outside virtual experiences. There is no unmediated access to people's experiences. For Hill Collins, the experiences of Black women are pivotal to the formation of Black feminist

standpoint, not because being a Black woman automatically gives her access to privileged forms of knowledge but because her location as an 'outsider within' can lead to the cultivation of Black feminist consciousness grounded in her material conditions (see also Combahee River Collective, 1977). Location here refers not to an "individual identity"; it describes "social locations or broader spaces occupied by groups of unequal power", and is therefore "not a decontextualised identity category divorced from historical social inequalities that can be assumed by anyone at will" (Collins, 1999, p. 86). This is an important point for virtuous VR that attempts to simulate the experiences of marginalised people.

In these ways, Black and postcolonial feminist scholars offer two important insights. First is that experience does not automatically engender privileged forms of knowledge, or access to 'truth'; this comes through struggle against and interpretations of one's experience that is historically and politically embedded in the world they inhabit. Second is that location matters when making knowledge-claims. As Hill Collins puts it, "No standpoint is neutral because no individual or group exists unembedded in the world" (p.33). In other words, when knowledge-claims assume a neutral subject, it is usually a particular genre of the human (Wynter, 2003). It is necessary to consider the politics of location when thinking about experience and knowledge. Based on these insights, I argue that experiences of displacement cannot be divorced from who experience it, and their particular locations in the world. While campaigns about the Syrian conflict and displacement based on possibilities of common humanity often garner attention, such as the Save The Children's (2014) 'If London Were Syria'[80] or the Twitter hashtag #CouldBeMyChild (El-Enany, 2016) in response to Kurdi's photograph (see Chapter 6), they are fundamentally based on false equivalence and historical-political amnesia. The assumption of such campaigns, including *Clouds Over Sidra*, that anyone can experience displacement is made possible through the erasure of historical and political conditions that create displacement (El-Enany, 2016; Danewid, 2017).

[80] Released in 2014 to mark the three-year anniversary of the Syrian war, the video comprises of one-second clips of a white British girl's life progressively getting worse as she has to seek refuge elsewhere as the country descends into conflict. The video can be watched on YouTube: https://www.youtube.com/watch?v=nKDgFCojiT8

The technological disembodiment and erasure of power relations and locations are therefore related. The erasure of my body and the particular social locations I live as a body undergird the common humanity envisaged by the creators of *Clouds Over Sidra*, upon which humanisation is predicated. This is a neutral body, a view from nowhere, into which everyone and anyone can enter to experience as many events and lives as one wants. To use Mohanty's (2003) term, a politics of transcendence undergirds the claim that anyone can 'step into the shoes of a refugee' and claim that virtuous VR like *Clouds Over Sidra* will enables users to recognise the common humanity of refugees. This politics of transcendence activated through technological disembodiment reflects the aforementioned persisting discourse of VR technology as enabling "bodily and subjective transcendence" (see also Balsamo, 1997, pp. 123–131; Green, 1999).

In *Clouds Over Sidra*, the depoliticising effects of technological disembodiment are amplified by the dominance of children who embody innocence and the idea of universal childhood. The film centres on Sidra's narrative of her life in the camp, and an abstract idea of return to Syria. It attempts to foster empathy towards children whose futures are being lost in a refugee camp, but without engaging in the political factors that led to this situation in the first place. The only slightly contextual information I receive about the displacement of Syrians is the statement at the very end that reads: "The world is facing the most devastating refugee crisis since WWII. As of September 2015, the Za'atari camp in Jordan harbors 80,000 Syrians escaping war and famine…" (*Clouds Over Sidra*, 2016). As Danewid (2017) argues in her analysis of pro-refugee activism and its assumption of 'abstract humanity' rather than 'historical humanity', this says nothing about the global and historical entanglements in which displacement and migration occur—the bombing of Syria by the UK, France, the US, and Russia; the enduring legacies of French and British creations of borders on contemporary dynamics of the conflict in Syria; or the enduring legacies of the French mandate of Syria (1920-1946) in its political life (Fildis, 2011); the development of the carceral system that the Assad regime wields with brutality against civilians[81] (Munif, 2020);

[81] The modern carceral system in Syria was established during French occupation in the 1920s for the French to ensure surveillance and coercion to quell anti-colonial resistance (Munif, 2020, p. 55).

and the impact of global neoliberal capitalism on the livelihoods of people in Syria that led to the uprisings to which the Assad regime responded with violent repression (Dahi and Munif, 2012; Gürcan, 2019). This point can be extended to the implication of people in the Global North in 'border imperialism' (Walia, 2013), including processes of bordering and control of mobility rooted in capitalism, colonialism, and the nation-state system, and the subsequent production of unequally mobile subjects (Anderson and Sharma, 2012). *Clouds Over Sidra* not only dis-locates refugees' experiences of displacement—why people have had to flee Syria, and why some have remained in Syria[82]—but also dis-locates the user in the Global North. Even if a user does take action to support refugees as prompted by the film, they remain an innocent bystander rather than already implicated in the capitalist global economy, colonial world order, and imperialist warfare (Danewid, 2017).

Displacement, then, is historically and politically embedded, and, most of all, embodied as an experience. By embodied as an experience, I mean that experiences of displacement always need to be understood in relation to who one is, how one is embedded in the world, and how one came to be displaced. As Turton remarked: "The truth is that there is no such thing as the 'Refugee Experience'…there are only the experiences, and the voices, of refugees" (Turton, 2003, p. 7). It is questionable to what extent virtuous VR can be said to simulate experiences of displacement because there is no generalisable experience of displacement. Users of *Clouds Over Sidra* may comment that "[the film] made you feel like you were a refugee yourself" (Alberghini, 2020, p. 13); yet, this arguably provides a false sense of intimacy, signifying instead consumption and commodification of refugees' experience that reinforce existing structures of domination (Cañas, 2016). The empathetic relationship that the film attempts to establish between the user and refugees engenders a politics of transcendence rather than a politics of location, effacing how contemporary im/mobility functions along a racialised, colonial logic. Just as the film mobilises the association

[82] While displacement is often equated with crossing an international border due to the legal definition of a refugee, there are just as many people who are displaced within Syria. As of the end of 2021, there were 6.8 million Syrian refugees (UNHCR, 2022, p. 17), and 6.9 million internally displaced persons (United Nations Office for the Coordination of Humanitarian Affairs, 2022). Some scholars advocate for the use of mobility framework and for more attention to be paid to forced immobility.

between humanity, innocence, and childhood to facilitate this, it also regurgitates “the extrapolation of refugee experience from individual social and historical contexts and the creation of a veneer of objectivity and dislocation” that Rajaram (2002: 248) incisively critiqued in the early 2000s. It is, then, debatable in what ways VR films present fundamentally new and better representations of refugees as advocates of virtuous VR claim.

4.8 Humanisation: Inclusion as assimilation

So far, I have analysed how *Clouds Over Sidra* uses figures of children and technological disembodiment to humanise refugees. Both strategies of humanisation are based on a logic of inclusion, whereby users recognise refugees as equally human as ‘us’ despite apparent differences. Arora comments that VR technology enables creators to represent refugees as fuller human beings and speak in their own voice: “There are so many misconceptions and stereotypes perpetuated by traditional media narratives of refugees or others less “fortunate” than us. Through VR/immersive tech, you can show the nuance and fuller picture of what people’s lives are like and—most importantly—you can hear from them in their own words. Have them invite you into the world” (2019). His main point is that other types of media produce either ‘dehumanising’ narratives about refugees (Introduction), and/or reinforce the unequal power structure whereby the audience is encouraged to take pity on refugees. In contrast, according to Arora, because of the technological affordances of VR, virtuous VR can show the complexity of people’s lives and experiences and shed light on refugees’ own voices. This is ostensibly the case in *Clouds Over Sidra*, since Sidra tells her own story of her life in Za’atari camp. She appears as an individual with her own thoughts, feelings, and hopes. *Clouds Over Sidra* aims to generate empathy through representations of refugees as people with individuality, dignity, and agency (Scott, 2014). This likely reflects Arora’s belief that depictions of suffering are ineffective in making people feel, engage, or act. Rather, what is more effective is to depict the ‘truth’ and people’s lives using storytelling (Arora and Jones, 2017).

However, what such advocates of humanisation miss is that humanisation based on a logic of inclusion—which I argue *Clouds Over Sidra* is an example—leaves unequal power relations intact. In this logic, humanisation means assimilation into particular

genres of the human (Wynter, 2003), which produces standards of humanness that refugees need to meet. Speaking of the idea of common humanity in relation to police violence against Black people in the US, Hartman (2003, p. 189) comments that, "It's as though in order to come to any recognition of common humanity, the other must be assimilated…utterly displaced and effaced: 'Only if I can see myself in that position can I understand the crisis of that position.'" Arora and Milk believe that VR technology is superior to other types of media precisely because it purports to virtually put people in others' shoes. Ontology and experience are collapsed, leaving no room for questioning what genre of the human into which refugees are being included (such as 'innocent children'). Therefore, although *Clouds Over Sidra* does not silence refugees in the same way that conventional humanitarian imaginaries do, humanisation based on a logic of inclusion silences through assimilation.

Moreover, the film was scripted by Gabo Arora and Edward Robles, and made "with cooperation with UNICEF staff" (Cravinho, 2016); no mention is made of cooperation or consultation with refugees. This raises questions about silencing even as the film features a refugee as the protagonist. The film is a site where knowledge about refugees and displacement from the perspectives of people working for international aid organisations and technology companies are reproduced (Rajaram, 2002). The film attempts to give some individuality to the usually amorphous figure of the refugee, but not too particular so that they can be the object of empathetic identification based on a common humanity (Sirriyeh, 2018). In other words, humanisation based on a logic of inclusion requires difference to be suppressed, rather than confronting how people come to be viewed as 'different' in the first place. Chapter 6 explores how the innocence and whiteness of Kurdi, a two-year-old Syrian Kurdish boy whose body on a beach was photographed and circulated in the media in 2015, played a role in eliciting a temporary wave of support towards refugees (El-Enany, 2016; Sirriyeh, 2018). Similarly, in *Clouds Over Sidra*, an innocent and universal child—'this child could have been mine'—may be more likely to attract empathy, but those who do not exist in this space of innocence are seen as undeserving of support or even life as I discussed in Section 4.4. Despite claims to represent refugees in new and even better ways using VR technology, *Clouds Over Sidra* thus reproduces universalised figures of children through the gendered and infantilising operations of innocence. Technological displacement presents an epistemology of displacement that erases its

embodied and politically and historically situated nature. Contrary to VR advocates' claims, humanisation is not a smooth path towards a better world. *Clouds Over Sidra* may cultivate empathy towards a particular figure of child refugees, but this reinforces the hierarchy of humanity and deservingness that always relies on recognition by those in privileged positions.

4.9 Conclusion: Humanising the modern/colonial order through virtuous VR

This chapter began by considering *Clouds Over Sidra*'s important role in establishing the relationship between VR technology and empathy. Using the film, I proposed a 'humanising' approach to displacement: one that emphasises a common humanity to which everyone including refugees belongs. In this approach, it is assumed that empathy will follow once refugees are recognised as 'fellow humans'. Advocates of VR, including creators of *Clouds Over Sidra* and WEF, suggest that VR is particularly well-suited for this humanising approach due to its ability to simulate experiences of displacement. I identified two strategies of humanisation: mobilisation of the association between humanity, universal childhood, and innocence, and depoliticisation of displacement through technological disembodiment. The first strategy reproduces a particular genre of the human—innocent child—that necessarily devolves into a politics of deservingness, rather than a politics that seeks to create a world where everyone has the freedom to move or stay. This is because the humanity that is being mobilised is tied to the notion of innocence, which delimits the boundary of humanity and inevitably places certain people outside of those limits. The second strategy, technological disembodiment through VR, generates a particular epistemology of displacement. An understanding of body as a container in VR technology presents displacement as a depoliticised, dehistoricised experience, one that anyone can enter and exit at will. This conceptualisation of the body and displacement is conducive to a humanising approach that obscures global power relations that shape who become displaced and into which genre of the human refugees are being included. Consequently, I argued that humanisation as it manifests in *Clouds Over Sidra* relies on a logic of inclusion, whereby the genre of the human into which refugees are included reflect that of the user, sustaining the coloniality of being.

This humanising approach to displacement matters because it is what makes virtuous VR on displacement useful for the actors identified in Chapter 3 (including creators and promoters of *Clouds Over Sidra*). Claims that VR is uniquely placed to humanise refugees, compared to other forms of media, is part of the broader claim that VR technology is a force for good. This is even evident in how Meta and Within talk about the fitness app, Supernatural. VR technology is presented as technology that brings people together and fosters human connection. Before companies like Within found ways to monetise VR technology, virtuous VR on displacement like *Clouds Over Sidra* established the link between VR, empathy, and connection, acting as a "gateway drug" (Tarnoff, 2017) for VR technology, despite it also being an integral part of the arms industry and the military as outlined in Chapter 3.

In the broader context that is witnessing a convergence of digital humanitarianism and philanthro-capitalism (Burns, 2019b; Barnett, 2023), humanising approaches to displacement fits the agenda of transnational capitalist class, which WEF and various companies are a part, and with whom international organisations like the UN as well as humanitarian organisations are becoming increasingly intertwined (Barnett, 2023). As mentioned in the Introduction, in the current modern/colonial order, borders operate as a productive force that are both produced by and produce relations of dominance that benefit the few (Mezzadra and Neilson, 2013; Walia, 2021, p. 6). Neoliberal policies that led to wealth accumulation for the few, decimation of domestic markets (including the agricultural sector), lack of investment into the public sector, and falling living standards for the majority of the population (particularly those living in rural areas), as well as increasing authoritarianism and militarisation of the Assad regime in Syria (Dahi and Munif, 2012; Gürcan, 2019) contributed to the Syrian conflict that has displaced millions. Although there is no causal relationship between climate change (extreme drought) and conflict, lack of state action on this front can also be cited as a contributing factor to the Syrian conflict (Gürcan, 2019; Walia, 2021, p. 73). Meanwhile, those who migrate to the Global North to seek safety and livelihood are met with deterrence, detention, and death.

Considering that state leaders and corporations in the Global North benefit from borders in this modern/colonial order that is open to capital but not people (except when they can be exploited), it ultimately does not matter how much virtuous VR

touches the hearts of the powerful. As long as migrants are understood as people who require ‘our’ empathy, help, and charity (Danewid, 2017; Walia, 2021) through the mobilisation of a generic humanity, it sustains the modern/colonial order by wilfully misrecognising the problem: that “mass migration is the *outcome* of the *actual* crises of capitalism, conquest, and climate change (Walia, 2021, p. 3; emphasis original). In this sense, for the transnational capitalist class such as WEF and technology companies, states in the Global North, and those who benefit from the border-industrial complex, humanisation of refugees through virtuous VR provides a façade of ‘doing good’ while continuing to benefit from the modern/colonial world order. In a way, then, virtuous VR functions as a technology that humanises the modern/colonial order—making it more palatable, and propagating the myth that displacement, border violence and death are malfunctions of the current system, not integral to it.

5. *Refugees* (2015): Immersive journalism as virtuous VR

5.1 Sea journeys towards Europe

Refugees begins with the distant sound of gunshots. A statement appears in front of me: “Almost three million people have fled across the borders to escape of the war that has engulfed their countries. The daily flow of men, women and children has become one of the largest forced migrations since World War Two” (*Refugees*, 2015). The sound of gunshots slowly merges into the rhythmic sounds of waves coming and going, and I find myself standing in an abandoned wooden boat by the beach on Lesbos and hear the sound of a broken radio.[83] With a life vest and some rubbish scattered about the floor, I surmise that this was used to cross the Mediterranean Sea.

Figure 23: I am standing on an abandoned boat, *Refugees*



In the subsequent scenes, I am a bystander and a witness to the arrival of refugees on dinghies to the shore, who are received by people who appear to be aid workers and volunteers (after a few viewings, I figure out one person wearing the T-shirt ‘Team

[83] While the island is never named in the film or in the scant interviews with the creators, Scopic created another 360º film titled *Lesbos 360* (*Lesbos Refugees*, 2015) which contains identical scenes to *Refugees*.

Humanity', a Greek non-profit organisation, and some volunteers from the Israeli organisation IsrAID), as well as photographers keen to capture the moment. This is when I start hearing Donald Trump's speech:

> Now I hear you wanna take in 200,000 Syrians, right? And they could be, listen, they could be ISIS, I don't know. Did you ever see a migration like that? I'll tell you right now, and I'm putting everybody on notice and hopefully this gets outside of this room and I guess it will with all these crazy cameras going back there. I'm putting the people on notice that are coming here from Syria as part of this mass migration, that if I win, if I win, they're going back. They're going back. I'm telling you, they're going back. [Followed by the cheers from the audience] (he is introduced on the screen as "Donald Trump – 2016 Presidential Candidate for President of the United States"). (Scopic, no date c)

Figure 24: People being helped off a boat, *Refugees*



There is a lot of movement, with shouting, cries, and the sound of waves. I see refugees wrapped up in foil blankets, mothers holding their children tightly, and photographers trying to capture the moment rather intrusively. There is shouting, happy cries, tears. As the scene continues, I start to hear the words (in Dutch with English subtitles on the screen) of far-right politician Geert Wilders, the "2017 Candidate for Prime Minister of Netherland [sic]":

Dear citizens of the Netherlands. We are being overrun with asylum seekers. This invasion is threatening our prosperity and our country". As he continues to say, "The Hague is simply abandoning you", we see a refugee hugging another refugee (perhaps his child), crying. We also hear him crying. A photographer approaches to take a picture of those two refugees. "Prime Minister Rutte, leave our borders wide open for those fortune seekers. We must save our country." The scene then switches to another refugee wrapped up in a foil blanket, holding a half-eaten apple and staring into the distance as he is surrounded by three photographers. He is sitting on countless deflated dinghies. "Of course, we must provide shelter for actual refugees but that must be [sic] happen in the nearby region, and not here. (Scopic, no date c)

Figure 25: People crying as Wilders speaks, *Refugees*



I am then back to the shore, but this time nobody is around. Melancholic music starts to play as I am left to absorb the scenery: the countless life jackets, deflated dinghies, the horizon of the ocean.

Figure 26: Abandoned life jackets on the shore, *Refugees*



The next scene shows a series of tents that refugees have set up by the beach. I can see some of them drying their clothes on ropes. The subsequent scene is refugees walking up a path beside the ocean. They are walking towards a bus that would take them somewhere; they are told to queue and wait for their turn. I then find myself driving up a hill on a car (it looks like the camera is on the roof of the car, or someone is it out of the front window), driving past some refugees going up the hill by foot. I arrive at what looks like a town by the ocean. I drive through this town and shortly arrive at a port where a ferry with a big logo 'Blue Star Ferries' is docked. Many refugees are waiting to board the ferry, when Ahmad starts speaking: "My name is Ahmad. I'm from Afghanistan. I'm 17 years old. I'm tired of war. Everybody is. Everybody is. I'm tired of war, and we don't want such a life like this. Tonight, we move to Athens. And after that, maybe go to Hungary and move from other borders. So I know it's hard but we have no choices. We have to do it. We have to take risks. It doesn't matter what" (Scopic, no date c). In the meantime, I see the refugees boarding the ferry, and in a few seconds, it sets off into the sea. Then those words appear: "In memoriam of all those heroes that lost their lifes [sic] in Lesbos" (ibid.). In the final scene, I am taken back to where it began, alluding to the cyclical nature of journeys across the Mediterranean. I see another boat approach the shore and I am left with the quiet and peaceful sound of the waves.

Figure 27: People and tents by the sea, *Refugees*



Figure 28: People boarding the ferry, *Refugees*



Like the three other films, I do not have a body (Chapter 4), although I would sometimes look down and see a man holding a long camera stick. As a floating visitor without a body, I felt acute discomfort throughout the film, such as the many scenes where I see photographers—whom I assume work for news agencies—desperately trying to capture the scene, often of people who are exhausted or in distress. At times, the film felt like a record of journalists and photographers than of refugees themselves. Me, looking at looking. My discomfort stemmed from what felt like unethical practice:

taking pictures of people right in front of them, as one person is crying and another is comforting them, or as a person is wrapped up in a heat blanket and staring into emptiness. Such scenes echoed the words of Kurdish-Iranian journalist Behrouz Boochani, who was imprisoned in a detention centre on Manus Island ran by the Australian government: “It seems that they [journalists] are waiting in ambush, waiting for the time they can see me helpless and fragile. They are waiting to make me a subject of their inquiry” (2019, p. 93). My discomfort also came from the fact that nobody would recognise my presence apart from the odd glances and suspicious or curious stares here and there. I was a camera, after all. Similar to what I felt while watching *Clouds Over Sidra* (Chapter 4), I felt like an intruder. Such scenes seemed to be posing the question: what does it mean to “think about what it means to look” (Sontag, 2003, p. 95)? I explore the implications of such moments of discomfort in Section 5.5.

Figure 29: A photographer capturing someone who looks exhausted, *Refugees*



The imagery of life vests and deflated dinghies covering the beach lingers on my mind. Life vests has come to serve as a symbol for the ‘European refugee crisis’, famously symbolised by Ai WeiWei’s installations. In February 2016, WeiWei attached 14,000 life jackets to the columns of the Konzerthaus Berlin, Germany (Azzarello, 2016). In 2017, he installed 3,500 life jackets on the windows of the Kunsthal Charlottenborg in Copenhagen, Denmark (ibid.). While such imageries of life vests signify the sheer

scale of death and indifference to the lives lost, it may also obscure who is doing the killing: the European border regime (Danewid, 2017).

Figure 30: A man holding an invisible camera stick, *Refugees*



5.2 Introduction: Contextualising the 'European refugee crisis'

Created by Scopic, Amsterdam-based VR studio specialised in 360 video and CGI production, *Refugees* (2015) documents the arrival of people on the Greek island of Lesbos, their departure towards Athens and then onto Western Europe, as well as the lives of people who are stuck on the island. Released in November 2015 on YouTube, it was filmed at the height of the 'European refugee crisis'. By the end of 2015, over one million people had fled to Europe via the sea (this figure includes those who did not survive the journey, estimated to be around 3,700 people according to UNHCR), with roughly 50% of them coming from Syria, followed by 20% from Afghanistan and 7% from Iraq (Clayton and Holland, 2015). By the end of 2015, around 380,000 refugees had arrived in Lesbos (El-Rashidi, 2019). Greece was the main point of entry to Europe in 2015, with 93% of people arriving by sea (Global Migration Data Analysis Centre, 2017, p. 12). In order to manage the increase in the number of people arriving in transit countries like Italy and Greece, the European Commission's European Agenda on Migration introduced the 'hotspot approach' in 2015. This established reception centres at points of entry such as Italy and Greece to manage "exceptional" arrival of migrants, so that the two countries could carry out the necessary

administrative processes ("identification, reception, asylum procedure or return") efficiently and the EU could provide more targeted support (Greek Council for Refugees, 2022). Hotspots were claimed to enable more efficient determination of whether someone was a refugee or not, and a quicker and more equitable relocation of refugees to EU countries (Fassin, 2016).

Lesbos was one of the five migration hotspots in Greece, also known as Reception and Identification Centres (RIC), among Chios, Samos, Leros and Kos. Although *Refugees* does not depict it, Lesbos was home to the infamous Mória camp, a former military compound that was turned into a camp in 2013 to prevent the entry of migrants to Greece in the post-financial crisis era, then made into an RIC in October 2015, and eventually burnt down in 2020 (Psaropoulos, 2020; Greek Council for Refugees, 2022). The camp had become infamous as an "open-air prison", where people suffered from overcrowding, poor hygiene and sanitation, inadequate shelter, and lack of healthcare and food (Human Rights Watch, 2018a). Such terrible living conditions, detainment, and the unending wait had led some people to harm themselves (Doctors Without Borders, 2018).

Refugees depicts refugees moving onto Athens on a ferry with the hopes of continuing their journey to Western Europe. When it was filmed, refugees could obtain transit papers and board the ferry chartered by the Greek government—as seen towards the end of the film—to head to mainland Greece (Bauer, 2015; Hernandez, 2016). The fact that this was possible suggests that the film was made before the adoption of the EU-Turkey Statement. Adopted in March 2016, the EU-Turkey Statement turned hotspot facilities into detention centres (Greek Council for Refugees, 2022), and those who arrived on Greek islands could not move on to mainland Greece. The EU-Turkey Statement stipulates that all "new irregular migrants" (i.e. those assessed as ineligible to seek asylum in the EU) arriving from Turkey to the Greek islands will be returned to Turkey, and one Syrian refugee will be resettled in the EU from Turkey for every Syrian "irregular migrant" being sent back to Turkey (MacGregor, 2019; Corrao, 2022). This means that those whose asylum claim is deemed "inadmissible" are left in limbo on Lesbos as they are not allowed to leave Lesbos until their cases are processed and, even if unsuccessful, they do not want to be returned to Turkey as it is not a 'safe third country' contrary to EU's claims (Kalir and Rozakou, 2016; Legal Centre Lesvos, 2021).

More generally, this agreement strengthened the cooperation between the EU and Turkey to stop all 'irregular migration', with Turkey agreeing that it will take measures to prevent 'irregular migration' from Turkey towards the EU. In return, Turkey received 6 billion EUR in total and a path towards liberalising EU visa requirements for Turkish nationals (Corrao, 2022).

As mentioned in the Introduction and explored in Chapter 3, there have been a steady militarisation and securitisation of European borders since the 2000s. The 'European refugee crisis' served as another turning point, with Frontex given more power, geographical reach, and funds in 2016 to police European borders including uses of illegal maritime pushbacks (Freudenthal *et al.*, 2022). The 'European refugee crisis' was also an event that produced a series of externalisation agreements, such as the EU Emergency Trust Fund for Africa (November 2015) designed to prevent people from migrating from Africa to Europe; agreement with Libya to intercept and deport people from the Mediterranean to Libya (2016); and the aforementioned EU-Turkey Statement. In this context, migration via the sea on boats have come to play a major role in the construction of 'crisis', narrated as "invasions" (Wilders) and "mass migration" (Trump). As suggested by the mention of 'ISIS' and 'Syrians' in Trump's speech, there is a "persistent conflation of migration, race, and Muslim identity as relatively floating signifiers" (De Genova, 2016, p. 81). This conflation[84] lies at the heart of why migrants and refugees have become the focal point of many nationalist movements across Europe. Since Europe is imagined as "a racial formation of postcolonial whiteness" (De Genova, 2016, p. 79) rooted in modernity/coloniality, those who are racialised as non-white, especially if they are Muslim—since Muslim refugees are seen as the constitutive other of white, Christian Europeans (Abbas, 2019, p. 2456)—are seen as an inherent threat.

The description on the film's webpage (Scopic, no date c) does not go far in shedding light on the global power relations that shape the reasons for people's movement—the underlying factors behind conflict, people's inability to work or travel, lack of education, and increasing economic hardship—but it does provide context for why

[84] Tudor (2018) also urges a distinction between racialisation (ascription of race) and migratisation (ascription of migration).

people are risking dangerous journeys to seek safety and security. It is also worth noting that, despite the title of the film and the usage of the terms 'refugee' and 'forced migration', it does not refer to the narrow, Convention definition of a refugee.[85] The reasons people flee listed in the descriptions concern both 'economic' and 'political' reasons, thus challenging the binary between 'refugees' and 'migrants' (Holmes and Castañeda, 2016; also see Introduction for a discussion of those categories). Rather than being bound up in the discourse of which term accurately describes people on the move, *Refugees* simply depicts people on the move: from the moment they arrive on Lesbos, to glimpses of what their lives are like on the island, and some people's onward journey towards Athens.

Although this chapter uses the concept of immersive journalism introduced in Chapter 3 and discussed in Chapter 6, I decided to use Refugees to focus on two aspects of virtuous VR that is distinctive from the three other films: how a documentary-style journalistic VR film attempts to 'humanise' refugees, and how (Muslim) refugee men relate to the concept of humanity. In the following sections, I begin by situating the film as a form of post-television journalism (Chouliaraki, 2013) that expands its scope due to the specific affordances of VR technology. I also emphasise that journalistic VR films like *Refugees* provide another type of content for the growing VR industry, although immersive journalism has not taken off (yet) as enthusiasts had hoped after the initial hype period of 2015-2016. I then discuss the aims of *Refugees*: to provide a 'humane' perspective to challenge abstraction of refugees' lives and the dichotomy of 'us' versus 'them', as outlined by the creators. I dissect the term 'humane' in humanitarian narratives, and link this to the development of an idea of humanity that signifies 'fellow humans' who belong to the same 'moral circle' (Laqueur, 2009).

The next section analyses how *Refugees* seeks to provide this 'humane' perspective on the 'refugee crisis'. As a piece of VR journalism, *Refugees* relies not so much on

[85] The 1951 Refugee Convention defines a refugee as: those with "well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it" (UNHCR, 1951).

linear storytelling by particular figures of refugees like *Clouds Over Sidra* and *Sea Prayer* (Chapter 4 and Chapter 6) but attempts to balance presenting facts with communicating the emotionality of the situation. It focuses on conveying the reality of migration through immersion and presence: migration as it unfolds right in front of the user's eyes. Drawing on Hemmings' (2012) concept 'affective dissonance', in Section 5.5 I use the term experiential dissonance to describe how *Refugees* attempts to create space for the users to reflect on the reality of migration against the mainstream divisive logic of 'us' versus 'them', and to direct them towards a humanising perspective that presents refugees as 'fellow humans'. I discuss three ways in which experiential dissonance manifest: the juxtaposition between anti-refugee speeches by Wilders and Trump and the reality of migration; the juxtaposition between scenes of stillness with scenes of commotion or movement; and affective and corporeal distancing between the user and the virtual experience. Using Hall (2019a) and Barthes' (1977) work, I highlight how the users may not arrive at the intended message as they actively participate in a communicative process that is negotiated and contested within the broader socio-political context.

The subsequent two sections highlight the importance of considering the dynamics that shape the process of humanisation. Contrary to the common association between refugees, women, and children that construct a feminised and infantilised humanity, *Refugees* predominantly shows refugee men. I therefore discuss the dynamics of racialisation and gendering that shape the humanity of refugees, and the importance of taking them into account as a way of thinking about humanity in a relational way rather than within the framework of sameness/difference. I conclude by returning to the symbiotic relationship between a variety of actors involved in the VR industry, while noting that the withdrawal of technology companies from sponsoring immersive journalism suggests it may indeed be easier to use humanitarianism (rather than immersive journalism) as an entry point to philanthro-capitalism.

5.3 'VR journalism' as virtuous VR: Content development and post-television journalism

In her report on the state of immersive journalism, Kangasniemi (2021) writes that immersive journalism experienced an initial hype in 2015-2016, which subsequently died down. Watson (2017) identifies three reasons behind the initial investment into

VR: curiosity for new technology, a desire to be an innovator in the field of journalism, and an interest in exploring new business models. However, immersive journalism did not take off due to a variety of factors including the end of collaboration and sponsorships from technology companies like Google and Samsung, lack of users (partly due to the high price of commercial headsets), and lack of a clear model for monetisation (Kangasniemi, 2021). Melissen (2016), one of the directors [86] of *Refugees*, talked about the need to "convince regular media that it's [VR is] a powerful new media" in 2016, but in 2023 immersive journalism still has not become part of mainstream news reporting[87]. Within this context, *Refugees* is an interesting case to analyse as an example of virtuous VR on displacement produced by an independent VR company during this initial period of hype. It can be considered virtuous VR not only because journalism is part of the communicative structure that represents the Global South to the Global North and communicates the imperative to act (Chouliaraki, 2013, p. 138), but also because it purports to provide a more "humane" perspective on the 'refugee crisis' (Perez, no date) which I argue is an example of a humanising approach to displacement. Although Scopic has commercial clients, *Refugees* is one of their "cultural, creative, and even journalistic endeavors" (van Gerven, 2018). It sits alongside their projects that seek to use VR 'for good', such as a "humanitarian documentary" to "promote conflict resolution" (Scopic, no date b), awareness-raising project about Duchenne muscular dystrophy (Scopic, no date a), and a training programme on racial profiling (University of Twente and ScopicLabs, no date).

In her study on "the immersive turn" (the rapid adoption of non-fiction VR), Rose (2018, p. 145) mentions the connection between de la Peña and Luckey to underline the "symbiosis between [VR] technology and content development", and the role of nonfiction within it. Immersive journalism, or 'VR journalism' as Scopic's Co-Founder Yori van Gerven calls it, is similarly a type of content that supports the expansion of the VR market, from which technology companies benefit and news agencies also

[86] Melissen is a war correspondent who has worked with news outlets in the Netherlands (Melissen, 2016).

[87] In the talk, Melissen (2016) notes that VR has not become an integral part of TV shows, for example, because the audience cannot watch the news as VR on their TV. They need to go to a website, which is why *Refugees* has been uploaded onto YouTube to make it more widely accessible.

stand to benefit once they find a way to monetise it. Developers of VR technology need content in order to sell their products; similarly, news agencies interested in VR need more people to buy VR headsets. In the realm of journalism, it was technology companies that sponsored content in the initial hype period. Google worked with The New York Times to launch its app and distributed Google cardboard headsets, and with *The Guardian* to create *Sea Prayer* and distribute the headsets (Chapter 6) (Watson, 2017, p. 28). Samsung worked with The New York Times and Euronews to develop VR content (ibid.). While technology companies have produced their own content, they also rely on the production of content by others including independent production companies like Scopic. *Refugees* was therefore part of the initial wave of interest and investment into immersive journalism. Although it has not born fruit (yet), it is indicative of the symbiotic relationship between actors identified in Chapter 3.

Van Gerven, Justin Karten (Co-Founder of Scopic), and Melissen all talk of VR as having "less framing" as the viewer is able to decide for themselves where to look (Polak, 2015). "When looking at certain footage in 360, you simply cannot look away" (2018), van Gerven says, likely referring to the fact that the user is surrounded by the scenery, as well as to the technological affordances of immersion and presence. Melissen (2016) similarly says that traditional news reports only provide a partial perspective, and that VR can provide a more holistic picture as users are surrounded by the scenery. He goes on to describe 360° videos as a "journalistic wish come true" since it provides "added values" of "taking people to places they cannot go"—returning to the idea of prosocial change for place (transporting the user to somewhere unfamiliar to them to feel closer to the issue at hand) as a connecting thread between VR and empathy (Foxman, Markowitz and Davis, 2021)—and "painting the (more) honest picture" (Melissen, 2016). Melissen declares in the talk that, "I don't want fiction, *I want more reality*. That's the power of 360º video" (Melissen, 2016; emphasis mine). To him, VR provides more reality because it breaks the frame (Milk, 2015) and it lets users experience facts rather than simply having them presented on paper or on the screen (de la Peña *et al.*, 2010). In advocates' mind, these are the technological affordances of VR that create a deeper connection and understanding of the issue being depicted (ibid.).

Scopic's understanding of 'VR journalism' is therefore aligned with that of de la Peña's:

"the production of news in a form in which people can gain first-person experiences of the events or situation described in news stories" (de la Peña *et al.*, 2010, p. 291). *Refugees* places the user in the midst of migration as an ongoing phenomenon, something that is unfolding in front of my eyes. I am not positioned as a migrant, but as a witness[88] to the reality of migration. Because of this experiential aspect, VR journalism may be considered as a form of post-television journalism (Chouliaraki, 2013) while expanding its parameters. Chouliaraki (2013) identifies the shift from television journalism to post-television journalism. The former features the journalist as "a guarantee of the authenticity of witnessing" (Chouliaraki 2013, p.147), and it is grounded in facts and objectivity. In contrast, post-television journalism, such as the integration of social media posts into news reporting, is participatory, whereby journalists are replaced with or work alongside 'ordinary' citizens, featuring first-hand testimony and personal opinion. In *Refugees*, it is first-hand experience of the news story, emotions, and opinions of the user that are at the centre of this VR experience.

While the creators attempt to provide a more "humane" perspective on the refugee 'crisis' to challenge the dichotomy between 'us' and 'them' (van Gerven, 2018), this is secondary to what the user themselves make of the experience. Although the creators stand on the side of refugees, *Refugees* makes no outright attempt to convince the user through argumentation or engagement with the question of injustice because the film tries to balance presenting the facts of the situation with communicating its emotionality. Ultimately, judgement on the issue of migration is deferred to the user. Users are provided with "more reality" (Melissen, 2016), and as the tagline on the film's webpage emphasises, they are encouraged to "make up your own mind" (Scopic, n.d.). In this sense, a key difference between *Refugees* and *Clouds Over Sidra* (Chapter 4) and *Sea Prayer* (Chapter 6) is that it is not primarily driven by storytelling by particular figures of refugees (like a refugee girl or a refugee father) but rather communication of facts on the ground.

In *Refugees*, therefore, the user is encouraged to make their own judgements about the ways in which refugees are treated based on their own virtual experience on the

[88] As mentioned in Chapter 3, witnessing in the context of journalism is "the act of seeing as a proof of the facts on suffering (the objective dimension of witnessing) and to seeing as an emotive testimony to the 'unspeakable' horror of suffering (the reflexive dimension of witnessing)" (Chouliaraki, 2013, p. 140).

island of Lesbos. The guarantor of authenticity is not the journalist or 'ordinary' citizens gathering information on the ground and sharing it, but the user themselves who are ostensibly transported into the news story. In this sense, *Refugees* is emblematic of post-humanitarian VR films that appeal to the ironic spectator (Introduction) who is open to taking action but is sceptical of anything outside of one's subjective experience.

5.4 Aims of Refugees: Providing a 'humane' perspective to challenge abstraction of refugees' lives and the dichotomy of 'us' versus 'them'

The following description is provided for the film on Scopic's webpage (n.d.):

> With no signs of the war in Syria ending, people continue to flee while refugees in neighboring countries lose hope of ever returning home. With many refugees being sheltered in the region for as long as four years, it comes as no surprise that the desire of moving west is growing dramatically. After spending years with the inability to work or travel, the lack of education for children, and the overall increasing level of poverty, more and more refugees are taking a leap into Europe; an often expensive and extremely dangerous endeavour where insecurity and desperation are as real adversaries, as hunger and sheer discrimination. While many European countries deal with internal policy tensions, misinformation and prejudice among its populations seem to successfully spread indifference, fear, and hatred. People quickly turn into numbers when the discourse becomes one of 'us' versus 'they' [sic]. (Scopic, no date c)

The film attempts to destabilise the dichotomy between 'us', those who legitimately belong to a nation-state, and 'them' the refugees, towards whom some of 'us' express indifference, fear, and hatred. During the 'European refugee crisis', refugees were represented as an anonymous group of people, crammed into a boat or walking in a large group, and media reports prominently featured statistics (Fotopoulos and Kaimaklioti, 2016) that drove 'crisis' narratives of 'unprecedented' numbers of refugees and "one of the largest forced migrations since World War Two"[89] (Scopic, n.d.). They

[89] White (2019) points out that claims of the number of displaced people or refugees being 'unprecedented' are often incorrect because of the changes in statistical measurements. He also emphasises that it is the relative figures, rather than absolute, that matter more in getting a fuller understanding of the number of displaced people.

are well-established representations of refugees: Malkki (1996) offered a critical discussion of dehistoricised and depoliticised representations of refugees as an anonymous, abstract mass in the 1990s. The media's focus on the sheer number of people fleeing to Europe mobilised the racialised fear of being "overwhelmed" by "mass migration" (Trump) or "being overrun with asylum seekers" (Wilders). These two modes of representation flattened refugees' experiences, rendering them "a site where Western ways of knowing may be reproduced and recycled" through, for example, securitising, racialising, victimising, and colonial discourses (Rajaram, 2002). Such discourses also work to frame refugees' lives as disposable lives (Butler, 2009) and to justify policies and border controls that are designed to deter and kill 'undesirable' people. In this way, refugees were first depoliticised, so that 'Western' actors could politicise them for various ends (Krzyżanowski, Triandafyllidou and Wodak, 2018). Within this broader context, *Refugees* attempts to challenge the abstraction of people's lives into numbers and to disrupt the dichotomy between 'us' and 'them' by presenting a 'humane' perspective on the 'refugee crisis'.

The director of *Refugees* Eduardo Hernandez Perez explains on his website that they created this film using VR technology "[I]n an attempt to restore the humane perspective of the refugee crisis and offer new insights to the public" (Perez, n.d.). Laqueur (2009) suggests that since the Enlightenment period (more specifically around the 18th century), 'human' came to be understood as an ethical subject in humanitarian narratives, as someone who not just feels pain but can suffer, and towards whom other humans have an ethical obligation to alleviate the suffering. It was also around this time that the idea of 'human' became affixed to the idea of 'humane', meaning "an obligation to treat fellow humans as family" (p.43), thus feeding into "the expansion of moral inclusion" (p.43). Through her examination of the role of narratives (e.g. torture and novels in the 18th century) in the emergence of human rights, Hunt (2007) argued that such narratives cultivated 'imagined empathy' and changed people's minds and affective disposition towards other human beings, feeding into the development of human rights. Hunt understands empathy as dependent on "the recognition that others feel and think as we do, that our inner feelings are alike in some fundamental fashion" (2007, p. 29)—linking to Laqueur's idea of humane as having the (same) capacity to suffer (as me)—which formed the basis for the development of universal human rights. Rorty's (1993) push for sentimental education in promoting

human rights by emphasising the similarities between human beings rather than differences follows a similar line of thinking. He believed that sentimental education, which mobilises the power of narratives to generate empathy and sympathy, allowed people to "see the similarities between ourselves and people very unlike us", eventually "outweighing the differences" thus leading to the cultivation of human rights (p.129). Drawing on such discussions, the intention to provide a 'humane' perspective can be understood as an example of a humanising approach to displacement, comprised of three elements identified in Chapter 4: recognition of refugees as 'fellow humans', assumption that this would lead to empathy, and a logic of inclusion.

Consequently, even as *Refugees* attempts to provide "more reality" of migration through VR, it presents the issue in a specific way to encourage users to see refugees as 'fellow humans'. The discourse of 'us' versus 'them' and the abstraction of peoples' lives into statistics are usually countered through particular narratives. For example, UNHCR talks of the importance of personal testimonies and storytelling in 'putting a face on the numbers' (UNHCR, no date). This fits in with the aim of sentimental education: to expand the moral circle of humanity so that more people see the similarities, rather than the differences, between themselves and those deemed as 'other'. Storytelling is also the strategy that the British journalist and activist Owen Jones advocated for in *The Guardian* in the wake of the 'European refugee crisis', pointing out the need to tell the stories of people's lives to counter racist rhetoric and violence rather than statistical argumentation: "Rightwing newspapers hunt down extreme and unsympathetic stories of refugees, and we fight back with statistics. Instead, we need to show the reality of refugees: their names, their faces, their ambitions and their faces, their loves, what they fled" (Jones, 2015). Most of all, refugees themselves have fought against this abstraction of human lives into numbers; they can and have been telling their own stories, though they have often been silenced and/or ignored (Nguyen, 2018; Nayeri, 2019b; Qasmiyeh, 2020).

In the next section, I outline how the film attempts to provide a humanising perspective on the 'refugee crisis' through what I call experiential dissonance, a strategy that utilises the affordances of VR. Taking cue from Hemmings' (2012) work on 'affective dissonance', experiential dissonance describes the ways in which *Refugees* incorporates different forms of juxtaposition to create the conditions for the emergence

of a humanising perspective on the 'refugee crisis'. Hall (2019a) wrote that the audience is not a passive receptor for the encoders (creator of the film who want to communicate a particular message); they are decoders who are active participants in the communication process, who are also part of the wider socio-political context. Using his notions of encoding and decoding, I argue that there is no guarantee that experiential dissonance will lead to humanising perspective on the 'refugee crisis'.

5.5 Experiential dissonance

I use the term experiential dissonance to describe how *Refugees* attempts to use the technological affordances of VR to create space for the users to reflect on the reality of migration against the mainstream divisive logic of 'us' versus 'them', and to direct them towards a humanising perspective. Experiential dissonance does not just refer to ambiguity. It is one way in which virtuous VR leverages the technological affordances of VR to create tension between different interpretations. This means that, as noted in Chapter 4, the post-humanitarian character of virtuous VR is not all-encompassing; there is space for users to reflect and to reach potentially politicising insights.

Experiential dissonance term is inspired by Hemmings' (2012) work on 'affective dissonance'. She devises this concept to think through the process of feminist politicisation and the potential for feminist solidarity. In this process, affect emerges as "a marker for their intertwined relationship" (p.148) between epistemology (knowing) and ontology (being). Affective dissonance emerges from an incongruity between "our own sense of being and the world's judgements upon us" (p.149): "[f]eeling that something is amiss in how one is recognised, feeling an ill fit with social descriptions, feeling undervalued, feeling that same sense in considering others" (Hemmings 2012, p.150). Drawing on Elspeth Probyn, Hemmings argues that the notion of 'experience' can break down the dichotomy between epistemology and ontology. When people experience dissonance between their sense of self and how the world judges them, it can serve as the start of a process of struggle—of struggling between structure and subjectivity. Importantly, however, affective dissonance does not guarantee politicisation or a transformation of the self or the social. In fact, it may lead to defensiveness or hostility. Nevertheless, Hemmings argues, affective dissonance is essential for the creation of a feminist politics.

Experiential dissonance similarly captures the relationship between epistemology and ontology that is so central to the experiential aspect of VR. It is also a term that describes how a journalistic piece of virtuous VR like *Refugees* attempts to balance presenting facts with the message the creators want to communicate. However, where experiential dissonance diverges from affective dissonance is that the user is positioned not as a refugee but as a witness to migration in *Refugees* in the virtual encounter (Nash, 2018, p. 126). The struggle therefore is not between their sense of self and how the world judges them, but between what they are witnessing and the divisive logics that Trump and Wilders propagate. Through this dissonance, the film seeks to steer the user towards a recognition that refugees are fellow humans, that there is no 'us' versus 'them'. While Hemmings' affective dissonance refers to the *ongoing and laborious process* of struggling between the self and the world, virtuous VR eliminates this altogether and markets itself as a technology that *automates* human connection and recognition (Nakamura, 2020).

I discuss three main ways in which the film creates experiential dissonance. First is the juxtaposition between anti-refugee speeches by Wilders and Trump and the reality of migration as it unfolds in front of my eyes. Second is the juxtaposition between scenes of stillness (e.g. when I am standing on a beach covered in deflated dinghies and discarded life jackets, or as I watch the ferry carrying refugees slowly depart the port) with scenes of commotion or movement (when refugees are arriving on the shore, or when I see journalists desperately trying to capture refugees being tended to by volunteers or refugees crying on the beach). Third is the affective and corporeal distancing between the user and the virtual experience. As a piece of VR journalism, *Refugees* utilises experiential dissonance to balance the intended message against creating space for the user to navigate and interpret what they are witnessing.

The first way in which *Refugees* creates experiential dissonance is the juxtaposition between what the user is experiencing—the reality of migration—and what they are hearing—Trump and Wilders' speeches. For example, the first 2 minutes and 30 seconds shows people arriving on Lesbos and the immediate aftermath of their arrival. At 00:35, Trump's voice comes in just as I see migrants arriving on the shore on a dinghy, and at 02:06, Wilders' voice comes in as I see volunteers attending to children and their mothers, a man who looks as if he is crying hugging a boy, and a man

wrapped up in a thermal blanket looking exhausted and numbingly staring into the air while three photographers capture this moment.

Trump's speech reproduces the widely propagated association between refugees and terrorism (Abbas, 2019). Wilders' speech draws on the oft-used distinction between 'genuine' and 'bogus' asylum seekers, presenting refugees as 'simply' seeking a better life rather than having a genuine claim on persecution (Johnson, 2011, p. 1027). Both speeches emphasise the sheer number of refugees leaving their countries and naturalise border controls, including deterrence and externalisation, as a rational response to a threat to 'us' and 'our way of life' (Rodríguez, 2018; Abbas, 2019). Such talking points are juxtaposed with the scenes I experience while I hear those words. Those 360º scenes communicate the desperation, exhaustion, and relief of people who have just arrived on Lesbos. The sense of immersion and presence created through the footage and the audio strengthens the affective pull of those scenes. The contrast between Trump and Wilders' speeches while I watch migration unfold in front of my eyes highlighted how removed their speeches are from the actual lives of refugees.

The second way in which experiential dissonance works is through the juxtaposition between scenes of stillness and scenes of movement. Scenes of movement include people arriving on the shore in the beginning, boarding a coach, walking up a hill, and boarding the ferry at the end. Scenes of stillness include those showing people who appear to have been living on the island, though unclear for how long. I see families living in makeshift tents by the beach and colourful lines of tents decorating the streets of the main town Mytilene, alluding to the different levels of mobility refugees on the island have. Some can board a ferry to move on to Athens and then to Western Europe, while others seem to be stuck and waiting. A few scenes featuring countless life vests and deflated dinghies hint at the number of people who have arrived on this island, and how many have died trying to make their way here.

One scene in particular stands out. It shows an empty beach, a moment of stillness surrounding me. It provides a contrast to the opening and following scenes characterised by a flurry of movement and a sense of rush and desperation. Contemplative music plays as I am faced with the countless numbers of life vests and dinghies on the beach. Beginning with the juxtaposition between the speeches and

the scenes, throughout the film I caught myself wondering what refugees went through on the journey, what the lives of people who cannot move onwards are like, and what their lives will be once they get to Athens. My mind went to the numbers of lives killed at sea during those journeys. I felt immense sadness and anger at a world that allows this to happen. And yet, all of these thoughts and feelings emerged from my specific location, which pertains to how I have come to understand my own experiences in the world as a result of epistemological and ontological engagement that had already happened before this experience. As I show below through an engagement with Hall's work, there is no guarantee that all users will engage with the experience in the same way.

The third way in which experiential juxtaposition manifests is through the constant affective and corporeal distancing between the user and the experiences of refugees. This distancing materialised, for example, through the nausea I experienced. Overall, *Refugees* induced nausea the most out of the four films analysed in this thesis. As Chapter 2 considered, this was most likely due to the camerawork (for example, the sped-up scene where I drive up a hill) as well as the amount of movement in each scene, which led to a mismatch between the information received by sensory organs. The disconnect between my stationary physical body and the movements in the film was jarring and I had to stop several times during the 8-minute long film to calm my nausea. This introduced a certain level of distance to the experience as it was not seamless. Technological disembodiment (Chapter 4) as well as discomfort generated in response to some of the voyeuristic scenes also added to the distance I felt between myself and the refugees in the film. For instance, there are a few scenes photographers are trying to capture the moment in a way that feels intrusive and unethical. A particularly noticeable scene is when a man is wrapped up in a thermal blanket looking exhausted and numbingly staring into the air. Three photographers are crouching in front of him and clicking away, seemingly without any regard for how this person may feel about being photographed in such a vulnerable and exhausted state. I felt intense discomfort and noticed that I am watching the photographers watching refugees, amplifying the distancing effect. Contrary to how *Clouds Over Sidra* attempted to generate an affective relationship of 'co-presence' and intimacy (Gruenewald and Witteborn, 2020), those distancing effects generated discomfort and contemplation.

Despite the creators' aim to provide a 'humane' perspective on the 'refugee crisis', there is no guarantee that experiential dissonance will lead to this perspective. Against a behaviourist analysis that understands communicative processes as a seamless and neutral transmission of the creators' message to a passive audience, Hall (2019a) argues that communicative processes are influenced by the wider socio-political context, and that the audience plays an active part as 'decoders'. Messages being communicated are subject to contradictions and negotiations, and how the audience decodes the message is shaped by the socioeconomic and political context, as well as the body of knowledge that the user brings to the experience (Barthes, 1977; Hall, 2019a). For example, someone who is anti-refugee may watch *Refugees* and have their beliefs confirmed: that 'we' *are* indeed being 'invaded' or 'overwhelmed', as it shows people continually arriving on the shores of Europe (suggested by the cyclical nature of the film), or that they should seek asylum in neighbouring counties rather than in Europe, as Trump and Wilders suggest. Witnessing the reality of migration in the film (denoted message) does not necessarily lead the user to arrive at the intended outcome (a specific connoted message) (Barthes, 1977). Although experiential juxtaposition is supposed to foreground a common humanity between the users and refugees as 'fellow humans' whose suffering we have an obligation to alleviate, there are always alternative and oppositional readings.

Furthermore, the space created through experiential dissonance for users to navigate the virtual space epitomises the post-humanitarian character of virtuous VR that privileges the subjective experience and feelings of the user (Chouliaraki, 2013). As Nash (2018) points out, there is an inherent tension between VR's 360º view that enables users to explore different viewing positions, and the experience as an encounter that necessarily requires attention to 'the other'. There is a "risk of improper distance insofar as the user prioritises their own experience of transportation and exploration (spatial presence) over engagement with the testimony of the other" (Nash, 2018, p. 128). What is noticeable about *Refugees* is that the testimony of the other is not provided through the voices of refugees (only Ahmad speaks during the film) but through the depiction of people's arrival to Greece via the sea, which as noted above, may not even serve as a testimony to the suffering of refugees depending on the user.

At the same time, virtuous VR's attempts at automating human connection and recognition are not all-encompassing. The three examples of experiential dissonance described have the potential to act as politicising moments that prompt the user to reflect on their positionality and sources of discomfort in ways that refuse a type of humanisation that is depoliticising as discussed in Chapter 4.

5.6 Feminisation of refugee humanity and the centrality of racialised men in Refugees

Unlike *Clouds Over Sidra* or *Sea Prayer* that mobilise a generic humanity through linear storytelling by particular figures of refugees, *Refugees* uses experiential dissonance in its attempt to balance reporting facts and providing a humanising perspective on the 'refugee crisis'. In contrast to *Clouds Over Sidra* and *Sea Prayer* which foreground figures of children, *Refugees* mainly depicts young and middle-aged men. This goes against the general trend among virtuous VR, which is often made to raise awareness and funds within the humanitarian sphere. For example, Gruenewald and Witteborn (2020) found that 17 out of the 20 films on the UNVR website feature children or women, with only one film featuring an adult man as a narrator and none featuring a male protagonist (p.6). In this sense, although VR technology is touted as being new and revolutionary in how it can be used to raise funds and awareness, as well as in representing refugees, it recycles habitual (and oft-critiqued) figures of refugees. Conventionally, humanitarian imaginaries concerning displacement frequently feature 'refugeewomenandchildren' (Enloe, 1991; Turner, 2019a, p. 601 adapted from) where women and children are used symbolically to elicit notions of victimhood, dependency, and innocence (see also Johnson, 2011). The relative dominance of men in *Refugees* can be explained by the fact that the demographic of those arriving via the sea to Greece are skewed towards men—for instance, the majority of people arriving in Greece were men between June (74%) and November (54%) 2016 (UNHCR, 2016a)—and as a piece of VR journalism, this is a fact that the creators are reporting. The centrality of men in the film poses a challenge to conventional representations of refugees as feminised and infantilised, thus apolitical. This, coupled with the racialisation of refugees as Muslim, challenges the established relationship between figures of refugees and humanity that relies on feminisation and infantilisation.

As mentioned in the Introduction, the 'myth of difference' created in the post-Cold War period feminised the figure of the refugee (Chimni, 1998; Johnson, 2011). This in turn mobilised the persistent association between women, innocence, and vulnerability within the framework of humanitarianism, whereby refugees are dependent on aid agencies and in need of protection (Malkki, 1996). Helplessness and speechlessness characterise refugees as an "imagined sea of humanity" (Malkki 1996, p.388), represented as an anonymous mass without history or political agency. As such, feminised refugeehood is a particular genre of the human. It is a humanity that requires help, often of aid agencies and a distance audience in the Global North. It is a humanity shaped by innocence (Ticktin, 2017), which does not threaten the overrepresentation of Man (Wynter, 2003). This depoliticised and feminised refugee humanity that dominates the humanitarian sphere has the potential to be included into the moral circle of humanity because it does not destabilise the existing colonial and racial category of Man.

Refugee men, on the other hand, unsettle this established relationship between feminised refugeehood and humanity. They occupy "an uncertain position as objects of humanitarian care" (Turner, 2019a, p. 597)[90] because refugeehood is understood as "passive, feminized, and depolicitized" (ibid. p.602). In fact, a lot of the discourses used to propagate suspicion and violence against refugees during the European 'refugee crisis' was precisely because of the (perceived)[91] dominance of men on boat journeys. As noted previously, Trump and Wilders' speeches mobilise racialised anxieties of being 'overwhelmed' or 'invaded' by refugees; association between refugees and terrorism due to Islamophobia and securitisation of migration particularly since the 9/11 terrorist attacks (Abbas 2019); and the idea that most of the refugees are 'bogus asylum seekers' who are come to Europe not for 'genuine' reasons but to seek out economic opportunities (Johnson 2011).

[90] Although his research is based on Syrian refugee men in Jordan, his research is still relevant given that humanitarian imaginaries concerning refugees 'travel' (Turner 2019, p.610).

[91] While the majority of men arriving to Greece between June and November 2015 were men, it decreased from 74% to 54% over the period. Conversely, in the same period, the proportion of women arriving by sea increased slightly from 13% to 17%. The proportion of children (whose gender is not specified) arriving in the same period increased from 13% to 29%.

Those talking points allude to assumptions and norms about men, masculinity, racialisation, and refugeehood. For example, Turner (2019b) identifies some of them in relation to Syrian refugee men in Jordan: the idea that men make war and are not victims of it; men are perpetrators of sexual violence, not victims/survivors; and men have agency and are independent, thus do not require targeted policies and support like women. This explains why representations of 'threatening young, single men' pervaded media representations during the 'refugee crisis' (Allsopp, 2017; Chouliaraki and Stolic, 2017; Kyriakidou, 2021) and were described as "dangerous" (Hudson, 2016). Such commentators and politicians claim that refugee men have particular views about women (that clash with 'progressive' values in Europe), that they should have stayed in Syria to fight against ISIS because they are "in good health and single" (comment by the ex-Czech President Milos Zeman), that they themselves are affiliated with ISIS (Strickland, 2016), and that "single men…are effectively economic migrants" (a comment by the UK's ex-Home Secretary Priti Patel) (Taylor and Syal, 2021). Such comments about refugee men cannot be divorced from their racialisation. Refugees and terrorists are regularly conflated in the media, mobilising and propagating Islamophobia and modernity/coloniality (Kapoor, 2018; Abbas, 2019). Muslims, and refugees racialised as such, are positioned as "Europe's constitutive outside, whose admittance would threaten the fundamental meaning of Europeanness" that is based on civilisation and modernity (Abbas 2019, p.2456). Incidents of sexual assault on New Year's Eve 2015 in Cologne, in particular, served to exacerbate hostility and violence against refugees (Brenner and Ohlendorf, 2016; Danewid, 2022). Drawing on a familiar colonial/modern framing, media and politicians in Europe presented this as an incident that symbolised the dangers of welcoming refugees: uncivilised Muslim men threatening civilised white/European women[92] (Rodríguez 2018; Danewid 2022). In reality, in the context of Syria, men are often vulnerable to police harassment and deportation from Jordan to Syria, and young men in Syria are at risk of military conscription, evasion of which results in imprisonment (Strickland, 2016; Turner,

[92] Initially, the media reported that 1,000 refugees of North African and Arab origin committed the sexual assaults. In reality, "several dozen young men, many of North African origin, are suspected of sexually assaulting and robbing hundreds of women in the crowd" (Brenner and Ohlendorf, 2016). The fact that the majority of those who are suspected to have committed sexual assault and robbery, of course, cannot be attributed to all refugees or all people of North African origin.

2019a). For many who made the journey to Europe during the ‘refugee crisis’, the decision for the men to migrate was a survival strategy, such as to send remittances back home to support the family (Allsopp, 2017).

While *Refugees* depicts refugee men on boats as well as groups of men living their lives on Lesbos, images of which have been used to fuel the racialised and gendered ideas of ‘invasion’ and ‘threat’, the film also depicts moments of vulnerability among refugee men. It depicts the palpable sense of exhaustion and relief post-journey, and shows men being cared for, as well as in vulnerable states. There is also an interview—although I only hear his voice, which is overlaid with the scene where people are boarding the ferry towards Athens—with an Afghan refugee called Ahmad, who talks of having no choice but to flee to escape war. His comment highlights the fragility of the voluntary (with agency)/involuntary (no agency) distinction between migrants and refugees; one can say he made the decision to flee, but how long can someone survive in a war? In this way, refugee men are at once presented as people who require help and those who make decisions for themselves: in the words of Allsopp (2017, p. 171), they are “at once, vulnerable and agentic” (as everyone is to different degrees).

As I discussed in the previous section, it is entirely possible that the depiction of refugee men in the film generates fear or hostility given that contact with another involves histories of the user that move them in different ways (Ahmed, 2014), and given governments’ anti-refugee policies and media coverage within which users encode virtuous VR about displacement. The overrepresented Man (Wynter, 2003) is usually the genre of the human against which the humanity of refugees is compared (Chapter 4). Therefore, even if some users might decode the film in the same way that the creators want them to, *Refugees* is not made in a way that questions the dynamics that shape who is considered to be worthy of being seen and treated in a ‘humane’ way. It is assumed that showing the reality of migration will lay the ground for a humanising perspective. However, a question that it does raise for this thesis is what it means to reconceptualise the well-established relationship between refugees and a feminised, innocent, and depoliticised humanity. I will return to this question in the Conclusion (Chapter 7).

5.7 Shifting from sameness/difference to relations

I have just noted that *Refugees* does not fundamentally question the conditions for and dynamics shaping the process of humanisation. Implicit in the way director Eduardo Hernandez Perez explains the aim of *Refugees* as "an attempt to restore the humane perspective of the refugee crisis" (Perez, n.d.) to counter the discourse of 'us' versus 'them' (Scopic, no date c) is the turn towards a generic humanity at the expense of the dynamics that shape who is considered as human in the first place. The mobilisation of generic humanity is not done through particular figures of refugees as is the case in *Clouds Over Sidra* (refugee girl) and *Sea Prayer* (refugee father caring for his son), but through the structure of the film. Since the film begins with refugees arriving, and then some being stuck and others moving on, it reinforces the presence of refugees on the shores of Europe as "always "arriving" from an "elsewhere" that appears to be radically external to the spaces of wealth, power, and prestige that historically could never have been produced apart from their precisely colonial relations of domination and those sea places of migrant and refugee origin" (De Genova, Garelli and Tazzioli, 2018, p. 258). Although the blurb on the website emphasises the reasons for which people leave, such as "the inability to work or travel, the lack of education for children, and the overall increasing level of poverty", similarly to the discussion in Chapter 4, connections are not made between those factors and, for instance, European colonial histories and ongoing neocolonial relationships that are inextricably connected to the racialisation and gendering of refugees' humanity (Danewid, 2017). In this sense, the presentation of the 'refugee crisis' as a generalised condition upon which the user is invited to contemplate risks reproducing suffering as a generalised condition of migration, rather than as a result of specific political and historical processes. This neutralises the presence and movement of refugees to/on/from Lesbos as apolitical, despite the political aim of providing a 'humane' perspective.

As pointed out in Chapter 4, this generalisation of suffering reproduces the idea of humanity based on a logic of inclusion that undergirds sentimentalist education. When the conditions depicted in the film are cut off from the histories of Europe, it obscures Europe's implication in transnational relations of power and the users' relationships to it. The humanising perspective that emerges is yet again one where the universalising category of the human absorbs refugees rather than destabilising it altogether. This is

because the perspective used to consider the concept of humanity is limited to one centred on sameness/difference, which tends to homogenise and obscure how phenomena are related. What is needed is a perspective that emphasises relations: how 'sameness' and 'difference' comes to be constructed and understood as such in the first place. Hyndman (2000) discusses this in her critique of 'UN [United Nations] humanism'. She argues that the UN, and more broadly the dominant international human rights discourse, seeks to manage 'difference' through "integration within a family of nations" (p.82). In UN humanism, difference is something to be overcome through assimilation into a universalising humanity. However, Hyndman argues that this conceptualisation fails to acknowledge power differentials and maintains the distinction between 'us' and 'them': "If one approaches relationships among cultural groups and spaces they occupy not as harmonized "us" and "thems" living together but as a series of unequal and uneven links between different subjects, then the question itself changes. Difference is not a question of accommodation but of connection" (p.67). In a logic of inclusion, the 'us' versus 'them' divide is sustained and 'we' are the ones to accommodate or welcome 'them'. For Hyndman, the way forward is to take a transnational approach that goes beyond 'sameness'—the very basis for the moral circle of humanity in what I call a 'humanising' approach to displacement—and 'difference', towards one that looks instead at the "messier links of historical and geographical contingency" (p.84).

5.8 Conclusion: Immersive journalism's quest for monetisation

This chapter discussed how *Refugees*, as a journalistic piece of virtuous VR, attempts to provide a 'humane' perspective on the 'European refugee crisis'. I identified this as an example of a humanising approach to displacement, as it seeks to lead users to the recognition of common humanity—a collective subject with capacity for suffering and whose suffering others have an ethical obligation to alleviate (Laqueur, 2009)—with the assumption that this will lead to affinity towards refugees. I proposed experiential dissonance as a strategy the film uses to achieve this. While creators are in support of refugees and this is the message that they want the users to take away from the experience, experiential dissonance enables them to balance this aim with reporting the facts on the ground in the spirit of journalism. Despite the creators' intentions, there are alternative readings that potentially go against them. Experiential

dissonance creates space for the users to make sense of it on their own terms, and for this reason my readings and reactions of it drew on my pre-existing knowledge and experiences that I brought into the experience. Moreover, the ability of users to explore the virtual world because of the affordances of VR (self-oriented) is in tension with the framing of this experience as an encounter with refugees (other-oriented). In contrast to *Clouds Over Sidra* (Chapter 4) and *Sea Prayer* (Chapter 6) that mobilise a generic humanity through linear storytelling by particular figures of refugees, *Refugees* does so through the structure of the film that obscures the dynamics that shape who comes to be seen and treated in a 'humane' way. This is why simply conveying the reality of migration does not automatically translate to seeing refugees as 'fellow humans', even though *Refugees* does not reproduce infantilised and feminised humanity of refugees.

Refugees' use of VR for journalism builds on the project that de la Peña started in 2012, which is now firmly established as immersive journalism (Chapter 3). Immersive journalism provides another type of content on which the VR industry relies for its growth and commercialisation. The word empathy is not used in relation to *Refugees* as de la Peña has used it to discuss immersive journalism. However, the film can nonetheless be considered virtuous VR in that it claims to provide a humanising perspective on the 'refugees crisis'; one that promotes the recognition of refugees as 'fellow humans'. Moreover, its creators frame VR technology as uniquely placed to bring distant news events closer to the user through immersion and presence (Melissen, 2016; van Gerven, 2018). Given that *Refugees* was produced during the initial hype period of immersive journalism, it can be understood as part of a broader attempt by various news agencies and companies to present themselves as innovative pioneers in a field that was just being established (Watson, 2017, p. 10; Foxman, Markowitz and Davis, 2021, p. 2182). The film was part of discourses about the pro-social nature of VR technology that spoke of it in terms of potentiality (Foxman, Markowitz and Davis, 2021), innovation and 'newness' (Harley, 2022)—a technology that brings "more reality" (Melissen, 2016) to journalism, and a technology that offers a 'humane' perspective because of its affordances.

Although the hype around immersive journalism died down after the period 2015-2016, the key question for news agencies going forward is how to monetise immersive journalism (Kangasniemi, 2021). According to Watson (2017), this quest for

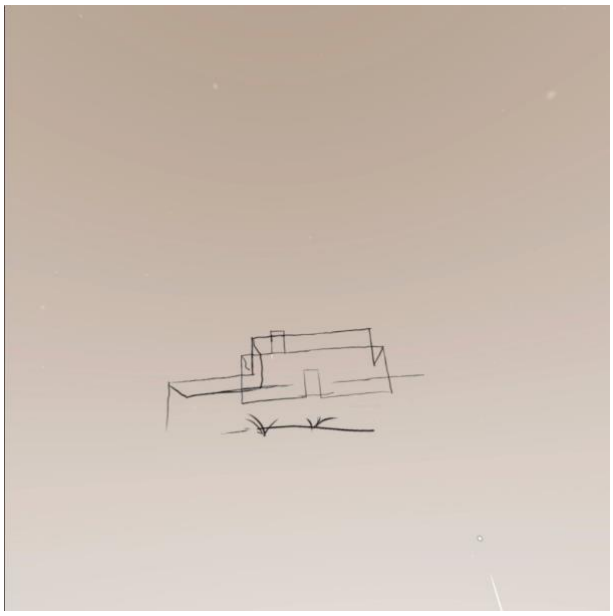
monetisation requires collaboration between different actors—independent production companies like Scopic, journalism schools, news agencies, technology companies who produce hardware. The role that displacement as a topic serves in this context is to buttress the appeal of VR technology as a tool for sentimental education that expands the moral circle of humanity. *Refugees* demonstrates the possibilities of balancing reporting the facts against the emotionality of the situation in the spirit of journalism, even as it seeks to provide a particular perspective on the issue. At the same time, it is interesting to note that technology companies have withdrawn from sponsoring news content (Watson, 2017), and have instead tended to collaborate with humanitarian organisations (Chapter 3). This may be because, as Burns (2019a) argues, it is indeed easier to present oneself as 'doing good' in the realm of humanitarianism where they can make explicit claims of doing so, rather than journalism where certain standards need to be met.

6. *Sea Prayer* (2017): 'Our' future is at stake? Limits of 'humanising' stories and reproductive futurism

6.1 Syria: From peace to repression and conflict

The film consists of four main scenes: idyllic and nostalgic depictions of the son Marwan's grandfather's farmhouse outside of Homs; depictions of the lives in the city before the protests, repression, and conflict began, characterised by bustling markets and peaceful coexistence; the start of the protests, to which the government forces responded with bombs and repression, a life characterised by death and destruction that Marwan grew up with; and finally, a scene on a beach where people from various countries gather to set sail to seek safety elsewhere, where the father prays for a safe journey knowing all too well the possibility of death at sea. All of those scenes are drawn in front of me in real time—starting from the black and white outline, colours, shifting lines, background music, narration, and the sounds of the scene work in harmony to generate a sense of immersion.

Figure 31: The first scene being drawn, *Sea Prayer*



In the beginning, I feels as if I am standing on a white canvas with no beginning or end. Then I start to see lines appear in front of me, tracing the outlines of a house, then trees, a stream, and a woman petting a goat. Colours start to fill in the drawings. I look up to the sky and what was once a white canvas has begun to change; there are vague

outlines of stars, and the sky turns blue. Few seconds into this scene, I also start to hear a host of sounds—of cows mooing, rooster crowing, leaves brushing against each other, the gentle sound of water flowing as a stream, cicadas chirping. Throughout this scene, the father—the narrator—nostalgically recalls Marwan's grandfather's farmhouse:

> My dear Marwan, in the long summers of childhood, your uncles and I spread our mattress on the roof of your grandfather's farmhouse, outside of Homs. We woke in the mornings to the stirring of olive trees in the breeze, to the bleating of your grandmother's goat, the clanking of her cooking pots, the air cool and the sun – a pale rim of persimmon to the east. We took you there when you were a toddler. I have a sharply etched memory of your mother from that trip, showing you a herd of cows grazing in a field blown through with wildflowers. I wish you hadn't been so young. You wouldn't have forgotten the farmhouse, the soot of its stone walls, the creek where your uncles and I built a thousand boyhood dams. (*Sea Prayer*, 2017)

Figure 32: Marwan's grandfather's farmhouse, *Sea Prayer*



Together with the narration, the illustration, the sounds, and the gentle violin-based music in the background paints an idyllic scenery, etched in the father's memory and contrasted with the later scenes imbued with sadness.

The illustration moves from left to right, so I turn my head in that direction. The next scene opens with the father saying:

> I wish you remembered Homs as I do, Marwan. In its bustling Old City, a mosque for us Muslims, a church for our Christian neighbours, and a grand souk for us all to haggle over gold pendants and fresh produce and bridal dresses. I wish you remembered the crowded lanes smelling of fried kibbeh and the evening walks we took with your mother around Clock Tower Square. (*Sea Prayer*, 2017)

Figure 33: Homs as the father remembers it, *Sea Prayer*



This scene depicts the Homs father knows and Marwan does not. I see a mosque and grand buildings come to life under a bright blue sky. There are people walking about and chatting, cars honking. I sense the dynamism and liveliness of the souk the father talks about. I see green trees growing tall into the sky.

Up until now, the colours are bright, lively, and uplifting. The father's voice is filled with warmth. This all changes in the third scene, where the colours become darker: hues of black and dark purple. This immediately evokes feelings that contrast with those from the previous scenes. This is a scene where the lightness and feeling of warmth

from the previous two scenes shift to darkness and feeling of heaviness. I hear the father say:

> But that life, that time, seems like a sham now, even to me, like some long-dissolved rumour. First came the protests. Then the siege. The skies spitting bombs. Starvation. Burials. These are the things you know. You know a bomb crater can be made into a swimming hole. You have learned dark blood is better news than bright. You have learned that mothers and sisters and classmates can be found in little triangular patches of sunlit skin, shining in the dark, through narrow gaps in concrete and bricks and exposed beams. (*Sea Prayer*, 2017)

As he is talking, I see and hear protests; people marching and shouting in unison, some holding the Syrian flag. Then there are images and sounds of bombs, guns, and helicopters. Dark shadows of military tanks and smoke go high into the soot-coloured sky.

Figure 34: Protests and a dark, smoky sky, *Sea Prayer*



And then it calms down. I turn my head to the right and see the final scene depicting a beach at night. It connects to the first scene, forming a line of illustration in a circular fashion. The mood in this scene is sombre and the colour is predominantly dark purple. A crowd slowly appears on the moonlit beach, and I see a single boat rocking gently amongst the waves. The father says:

Your mother is here tonight, Marwan, with us, on this cold and moonlit beach, among the crying babies and the women worrying in tongues we don't speak. Afghans and Somalis and Iraqis and Eritreans and Syrians. All of us impatient for sunrise, all of us in dread of it. All of us in search of home. I have heard it said we are the uninvited. We are the unwelcome. We should take our misfortune elsewhere. But I hear your mother's voice, over the tide, and she whispers in my ear, 'Oh, but if they saw, my darling, even half of what you have ... If only they saw. They would say kinder things, surely.' (*Sea Prayer*, 2017)

Figure 35: People on the beach at night, *Sea Prayer*



As more and more people get drawn on the beach, I see the father holding Marwan being drawn into life. The father stares into the boy's sleeping face:

I look at your profile in the glow of this moon, my boy, your eyelashes like calligraphy, closed in guileless sleep. And I say to you, 'Hold my hand. Nothing bad will happen.' These are only words. A father's tricks. It slays your father, your faith in him. Because all I can think tonight is how deep the sea, and how vast, how indifferent. How powerless I am to protect you from it. All I can do is pray. Pray God steers the vessel true, when the shores slip out of eyeshot and

> we are a flyspeck in the heaving waters, keeling and tilting, easily swallowed. Because you, you are precious cargo, Marwan, the most precious there ever was. I pray the sea knows this. Inshallah. How I pray the sea knows this. (*Sea Prayer*, 2017)

Figure 36: The father holding Marwan on the beach, *Sea Prayer*



The scene concludes with a reference to the title: a father praying to the sea that it protects his precious son, knowing too well that the sea is "indifferent" to his prayers. It is a sombre conclusion to a film that began with peace and warmth. After this illustrated scene, two paragraphs mentioning the deaths in the Mediterranean appear against a black background:

> Sea Prayer was inspired by the story of Alan Kurdi, the three-year-old[93] Syrian refugee who drowned in the Mediterranean sea trying to reach safety in Europe. In the year after Alan's death 4,176 others died or went missing attempting that same journey. The number of deaths at sea continue to rise. (*Sea Prayer*, 2017)

The violin music continues, and the credit starts to roll.

[93] It was established that he was two-year-old.

The fact that the film is an animation being drawn one scene at a time enabled me to focus on the particular scene, rather than having to look around 360℃ like the other three films analysed in this thesis. In this instance, then, *not* having the freedom to look around provided me with a more immersive experience.

6.2 Introduction: Death of Alan Kurdi and immersive journalism

Sea Prayer is an animated VR film created in a collaboration between *The Guardian* newspaper (its in-house VR team); UNHCR; VR artist Liz Edwards, and post-production studio SoWhen? The film is narrated by actor Adeel Akhtar. Afghan-American novelist Khaled Hosseini wrote the story after being moved by the photograph of a two-year-old Kurdish-Syrian boy Alan Kurdi's body on a beach in Turkey, who died in September 2015 after attempting to cross the Mediterranean for Europe. Hosseini wrote the story in one afternoon, based on a speech he gave at a fundraiser for refugees in New York (Hosseini, 2018c). In terms of the technology, *The Guardian* (2017b) notes that this was the first narrative animated VR film to use Google's Tilt Brush. In fact, although Google is not named as a collaborator nor explicitly identified as a sponsor, it funded *The Guardian*'s VR efforts (more on this in Section 6.3 below) (Southern, 2017). The film unfolds as a Syrian father reads out a letter in the form of a monologue to his son, Marwan, who is asleep in his arms by the beach. It describes what led to the father's decision to flee Syria, and the final scene depicts the father and Marwan waiting to board a boat on the beach among other refugees. After the release of the VR version, *Sea Prayer* was published as an illustrated book in 2018.

Alan attempted to cross the sea with his father Abdullah, mother Rehanna, and brother Ghalib during the 'European refugee crisis' in 2015, when over one million people fled to Europe via the sea as mentioned in Chapter 5. Rehanna, Alan, and Ghalib all died during this journey. Alan's body was photographed by Turkish photographer Nilüfer Demir for the Dogan News Agency in September 2015. When it was released, it caused a stir in mainstream media, particularly in Europe at the heart of the 'refugee crisis'. The photograph of Alan initially spread on Turkish social media and became the top-trending picture with the hashtag "KiyiyaVuranInsanlik" ("humanity washed ashore") (Smith, 2015). There were debates among news outlets regarding the ethics

of publishing such a graphic image of a dead child, with some deciding to publish a less graphic version of a Turkish officer carrying Alan's body or deciding not to publish the photograph at all, while others publishing the more graphic image of Alan's body lying limp on the beach (Mackey, 2015). *The Guardian*, who released the VR version of *Sea Prayer*, was one of the latter news outlets and they released an editorial justifying their decision. Recognising its own editorial code that the publication of photographs of children must have a "strong public interest justification", the editor in chief and the deputy editor decided that the photograph held "enormous poignancy and potential power" in galvanising "public sympathy" and "anger at Britain's role as an apparent bystander in this saga" (Fahey, 2015). Importantly, they believed it was crucial to provide the context to his death. On the day that *The Guardian* published the photographs of Kurdi, the then-UK Prime Minister David Cameron had refused to accept more refugees. This provided a "juxtaposition of the picture in the paper" (ibid.). Given *The Guardian*'s stance, it is unsurprising that it decided to create a VR film based on the photograph of Kurdi.

During the 'European refugee crisis' of 2015, the majority of those who entered Europe via the sea crossed the Aegean Sea from Turkey to Greece (UNHCR, 2016b, p. 32). In 2015, 50% of people who arrived in Europe via the Mediterranean was from Syria, followed by Afghanistan (21%), Iraq (9%), Eritrea (4%), Pakistan (3%), Iran (2%), Nigeria (2%), Somalia (2%), Morocco (1%), and Sudan (1%) (UNHCR, 2016b, p. 34). As outlined in the previous chapter (Section 5.2), the European governments' responses to people seeking safety and a better life were detention, shifting responsibilities, externalisation agreements with countries like Turkey and Libya, and more investment into border security (see Chapter 3). For some island countries like the UK and Australia[94], boat journeys have become a site around which a narrative of 'crisis' has been constructed, where governments frame boat arrivals as a threat to national sovereignty and to the 'fairness' of the asylum system (Matera, Tubakovic and

[94] Australia is infamous for its offshore processing (in Papua New Guinea), mandatory detention (on Manus Island), and militarised border security operations (e.g. 'Operation Sovereign Borders'). Offshore processing policy was initially introduced as the 'Pacific Solution' in 2001. In the UK, the government proposed a bill to 'Stop the Boats' in 2023, which would detain and deport people who arrive in the UK via the sea.

Murray, 2023). Such governments emphasise whether someone arrives via legal routes, using this to create a dichotomy between deserving/good refugees and undeserving/bad refugees (ibid.). As mentioned in the Introduction, the Global North's approach to migration has become increasingly selective, restrictive, and militarised since the 1990s. In the European context, this development has led to the increasing entanglement between humanitarianism and security, where militarised and securitised responses to migration are presented as necessary to save lives and prevent 'tragedies' (Little and Vaughan-Williams, 2017; Pallister-Wilkins, 2017). Deaths of refugees and migrants, whether at sea or on land, and the violence they experience are blamed on 'smugglers', obfuscating the fact that smuggling networks flourish when there are no safe routes for people to migrate. The narrative of saving lives and the language of 'crisis' limit the terrain of political discussions and interventions because few people would object to the aim of saving lives (Pallister-Wilkins, 2017, p. 22).

It should also be noted that Alan was Kurdish-Syrian. Although most media reports referred to him as Kurdish-Syrian, how his Kurdish roots impacted his life in Syria and experiences of displacement were not considered in depth. As a result, he became the face of the 'Syrian refugee crisis', which presented Syria as a homogenous nation-state and privileging the national identity. While Alan's family had settled in Damascus, Kurds became target of the Syrian government's security forces once the protests broke out in 2011, in addition to shelling affecting civilians in general. The Kurdi family then fled to Kobani (a Kurdish-majority area within Syria). They initially experienced financial difficulties, and they later became a target of the ISIS, who attacked Kurds and other minority groups (Barnard, 2015). The family moved to Turkey looking for safety and stability, and lived there for three years before going on the fateful journey. Abdullah's sister Fatima Kurdi had been trying to sponsor the family to Canada but the application was rejected as the family were unable to prove refugee status (Smith 2015). It was impossible for them to prove refugee status, as Turkey only grants refugees temporary protection status to Syrians[95] and it is deemed a 'safe country'

[95] Turkey is a signatory to the 1951 Refugee Convention and the 1967 Protocol Relating to the Status of Refugees but maintains the geographical limitation of the 1951 Convention. This means that only

(Barnard, 2015; Human Rights Watch, 2018b).

The treatment of Kurds in Syria can be traced to the historical development of the nation-state of Syria. During the French Mandate[96] (1920-1946), the French used a divide and rule policy to limit Arab nationalism (Yildiz, 2005, p. 28), favouring Druze, Alawites and Kurds (Syrians for Truth & Justice, 2018, p. 10). At this time, Kurds did not have a distinct nationalist political identity as they held various stances towards the French and were split among different regions (ibid.). It was during the establishment of the United Arab Republic (1958-1961), which united Egypt and Syria under the Ba'ath Party, that Kurds began to be seen as an explicit threat to Arab nationalism for being a non-Arab minority group and for their association with "feudal chiefs" and "notables" that the Party wanted to stamp out (Tejel, 2019, p. 370). The regime portrayed Kurds as traitors and separatists; Kurds were removed from the military; prominent Kurdish cultural leaders and political activists were arrested and detained; and Kurdish language and Kurdish publications were banned. What happened during this period continued to shape people's perception of Kurds for decades (Yildiz, 2005, pp. 31–32). After the end of the United Arab Republic in 1961, Kurds faced assimilationist and Kurdish-exclusionary Arabisation policy (Yildiz 2005), particularly in Northern Syria which has a large Kurdish population. Kurdish language is still not recognised as an official language in Syria and dissemination of publications in Kurdish remains banned (Syrians for Truth & Justice, 2018). The census carried out in north-eastern al-Hasakah province in 1962, which rendered around 120,000 Kurdish people (20% of the Syrian-Kurdish population) stateless (Human Rights Watch, 1996, p. 3), continue to affect Kurdish people. The government has used this census to

refugees from European countries qualify as refugees in Turkey, and refugees from non-European countries are given 'conditional refugee status' under the Law on Foreigners and International Protection (LFIP), adopted in 2013. However, Syrian nationals and refugees and stateless people from Syria are who have arrived in Turkey after April 2011 are provided with temporary protection (UNHCR Türkiye, no date).

[96] France came to rule Syria after the Sykes-Picot Agreement (1916), which divided Ottoman Empire's Arab lands into British and French spheres of influence. France wanted to "preserve her centuries-old ties with the Syrian Catholics, gain a strategic and economic base in the eastern Mediterranean, ensure a cheap supply of cotton and silk and prevent Arab nationalism from infecting her North African empire" (Fildis, 2011, p. 129). Kurdish areas were split into Turkey, Iran, Iraq, and Syria.

displace Kurdish people living in the areas on the border with Turkey and Iraq by settling Arab families, and stateless Kurds continue to face difficulties in voting, healthcare, employment, property ownership, and education (Syrians for Truth & Justice, 2018).

Although immersive journalism is a topic discussed in Chapters 3 and 5, this chapter provides a more in-depth analysis on this issue given the collaboration between UNHCR, *The Guardian*, and Google. I also use this chapter to illuminate a different dimension of the relationship between the figure of the child and humanity by focusing on the idea of a future connected to the figure of children. The chapter begins by considering the collaboration between UNHCR, *The Guardian*, and Google from a political economy perspective. While Google seems to have withdrawn from the VR market for now, *Sea Prayer* illustrates Google's attempt to enter both the journalism and humanitarianism to cultivate new markets. I then discuss Hosseini's use of storytelling to resist the dehumanising effects of anti-refugee rhetoric and uses of statistics. Drawing on others who have made similar arguments, I elucidate two major assumptions behind techno-utopian framings of virtuous VR: first, the assumption that stories of refugees will lead to the listener reacting with empathy, and second, the assumption that increasing empathy or kindness towards refugees will make the world a more just place for them. The following section situates *Sea Prayer* as remediation of the photograph of Alan Kurdi that was widely circulated in the aftermath of his death in September 2015. In this context, I point to the specific circumstances under which Kurdi's family fled Syria, and the subsequent erasure of such specificity in the reception of the photograph and Kurdi's death. The following two sections employ the framework of reproductive futurism (Edelman, 2004) to analyse two central figures in Sea Prayer: the unnamed father and his child, Marwan. Analysis of the film using the framework of reproductive futurism brings to the fore two competing forces in Sea Prayer's attempts to humanise refugees. On the one hand, the film attempts to attend to the factors that specifically put Marwan's and refugees' lives and futures at risk. On the other hand, the film obfuscates such specificities in favour of a call to protect the future of generic, universalising humanity as symbolised by the Child.

6.3 Philanthro-capitalism and digital humanitarianism: Google, *The Guardian*, and UNHCR

Building on the discussion on immersive journalism in the previous chapter, this section demonstrates Google's entrance into the fields of journalism and humanitarianism through *Sea Prayer*. First, I start with Google's entry into journalism. Chapter 5 noted that the journalism industry has been facing financial challenges. *Sea Prayer* is an example of a major technology company investing in immersive journalism during the initial period of hype (Kangasniemi, 2021). Virtuous VR on displacement provided Google with the opportunity to use its technologies and funds 'for good', while *The Guardian* could present itself as being at the forefront of immersive journalism. *The Guardian* established its in-house VR team in 2016, presenting itself as being "at the forefront of digital innovation" and "marrying the Guardian's experience of quality journalism with innovative storytelling", as the head of VR team Francesca Panetta put it (Guardian News & Media press office, 2017). Google funded *The Guardian*'s VR project, alongside news outlets like The New York Times that also released a VR experience called *The Displaced* (2015)—which was also made with Vrse, the same company involved in *Clouds Over Sidra*—about three child refugees from Ukraine, South Sudan, and Lebanon (Southern, 2017).

Just as The New York Times' collaboration with Google saw them distribute more than one million Google Cardboard[97] kits so that users could watch *The Displaced* (Jackson, 2015), *The Guardian* also distributed 97,000 Google Cardboard headsets to UK readers to "celebrate" the launch of its VR app for Google Cardboard in October 2017 (Guardian News & Media press office, 2017). Between 2016 and 2018, *The Guardian* produced various VR experiences about nature, autism, solitary confinement, and displacement. All of those experiences were available on Google's smartphone-powered VR headset, Daydream[98]. *Sea Prayer* also acted as a promotion for Google's Tilt Brush technology[99]. Released in April 2016, Tilt Brush is a VR app that enables

[97] Google Cardboard is a rudimentary smartphone-powered VR headset that is made from cardboard.

[98] Google announced that it will discontinue the Daydream headset in 2019, and since 2020 it no longer provides updates for the Daydream app.

[99] In January 2021, Google announced that it will stop the active development of Tilt Brush, and made the code open source, allowing anyone with knowledge of coding to customise it.

users to draw, paint, and sculpt in 3D in VR using the hand-held controllers, mimicking the motion of painting in real life.

Creech and Nadler (2018) argue that venture philanthropy, where companies invest in charitable causes, is a specific form of funding with a focus on economic interest, revenue-generation, entrepreneurial values, fast growth, and cultural change (p.73). Google's partnership with news organisations experimenting with immersive journalism therefore functioned as a way to extend its power in the journalism industry and as a form of reputation management. Although this happened after the release of *Sea Prayer*, Google's approach to the journalism industry can be glimpsed in its launch of Google News Initiative (GNI)[100] in 2018. In this initiative, Google promised to invest $300 million into the news industry through 2021 (Schindler, 2018). This was a response to the increasing scrutiny Big Tech firms like Google and then-Facebook were facing at the time, and also an attempt to keep up with Facebook's global funding programmes and to expand its influence over news infrastructure (Nakamura, 2020; Papaevangelou, 2023, p. 6). GNI initially had three objectives: "evaluate and strengthen quality journalism", "evolve business models to drive sustainable growth", and "empower news organizations through technological innovation" (Schindler, 2018). 'Innovation' operates as a key word in how both Google and *The Guardian* frame their investment into VR technology, which reflect a broader trend in journalism that Creech and Nadler (2018) term 'innovation advocacy'. Through an analysis of research produced by think tanks and foundations on journalism in the US, they argue that 'innovation' remains an ambiguous term that is posited as a market-oriented solution to various problems in journalism. Through their funding, Google and Facebook offer their services as 'innovative' solutions to journalism's woes such as declining audience and revenue, so that they become "the de-facto infrastructural backbone of the news industry" (Papaevangelou, 2023, p. 13) by capturing media organisations and key stakeholders, news production and distribution routes, and revenue sources, as well as shaping the rules and processes that govern journalism (ibid., p.14). Such technology companies also act as venture philanthropists, and 'innovation' again plays a key role in mobilising resources for the pursuit of revenue generation (Creech and

[100] Google initially experimented with funding news organisations in France in 2013, then expanded into the EU in 2015, then globally with GNI (Papaevangelou, 2023, p. 5).

Nadler, 2018, p. 80). In this way, the same technology companies that have exacerbated the woes faced by the journalism industry through their capture of the advertising industry are presenting themselves as saviours (Papaevangelou, 2023).

Despite such attempts to make headway into immersive journalism, both *The Guardian* and Google have halted its VR projects in recent years. In July 2018, *The Guardian* released its last VR experience. Although the message by Panetta and the VR team says "see you soon" (Panetta *et al.*, 2018), the newspaper has not released any more VR films since then. In October 2019, Google scrapped its VR headset Daydream (BBC News, 2019). Like Samsung, they saw no future for smartphone-powered VR headsets and could not compete against standalone headsets, most notably those from Meta. Lack of broad consumer and developer adoption was also cited as a reason behind this decision (BBC News, 2019). However, there are signs of Google re-entering the VR/AR/XR market. In 2023, Google announced a partnership with Samsung and Qualcomm to create an XR platform (Kharpal, 2023).

Although Google and *The Guardian* have stepped back from VR technology, Google still made gains from endeavours like *Sea Prayer*. If the main way in which technology companies are trying to capture the news industry is through the capture of infrastructure and networks than through straightforward financial dependency as Papaevangelou (2023) argues, it is as important to attend to the long-term financial and infrastructural ties and dependencies that technology companies are seeking to establish with the journalism industry. Even if Google's financial sponsorship has ended, immersive journalism was one way in which technology companies could promote innovation advocacy to shape the terrains on which journalism's future is discussed. In fact, after the release of *Sea Prayer*, Google partnered with *The Guardian* through GNI to develop the Premium tier in their news app to increase its revenue from subscriptions[101] (Schindler, 2018). Therefore, technology companies' roles in immersive journalism need to be understood within this broader context. It is likely that technology companies are waiting for a better time to re-enter the VR market and immersive journalism as there is more push towards realising 'the metaverse' (Chow, 2023; Schwab, 2023).

[101] *The Guardian* currently does not put up a paywall, and pursues a reader-funded business model.

Sea Prayer also points to Google's entry into humanitarianism via digital humanitarianism in the form of VR technology (Burns, 2019a). After the release of *Sea Prayer*, in 2017, Google partnered with UNHCR to create an interactive website on the 'Syrian refugee crisis' called 'Searching for Syria'[102] that answers the top five most searched questions about it. Those five questions were made into a narrative, utilising Google's technologies like 360º photospheres (panorama) with audio, imagery, film, infographics and data visualisations (Awwwards, 2017). Visitors could share content via social media, donate, or sign up to UNHCR's petition (UNHCR, 2017). UN High Commissioner for Refugees Filippo Grandi praised this project as "a fantastic project with Google that allows us to pinpoint and answer the five key questions about Syrian refugees and displaced that audiences most want to know and help us rally much needed support and funding for our humanitarian effort" (ibid.). It is claimed that almost 10% of the over 2 million people who visited the site either donated, signed the petition, or shared the content (Awwwards, 2017). The project used Google's services like the VR View library[103] and Google Cloud Platform. Like the case of immersive journalism, partnerships with major humanitarian organisations like UNHCR constitutes Google's business model and marketing strategy (Burns, 2019b), where it can market and sell its products and services to the public as well as to humanitarian organisations. In fact, there is even an instance of UNHCR promoting Google Cardboard in its article titled '7 videos guaranteed to change the way you see refugees' (where *Clouds Over Sidra* features as "the most powerful video on this list") (Parater, 2015). For UNHCR, the 'Searching for Syria' partnership is a way to "break through the compassion fatigue and the fear" to engage people in a new way (Deighton, 2017). For them, it combines UNHCR's expertise on displacement with Google's creative and design skills (ibid.). Partnerships like this are thus seen as a way for UNHCR to survive in the increasingly competitive 'market' of humanitarianism, where 'innovation' provided by technology companies like Google are seen as a solution for survival (Burns, 2019a).

Google also has a for-profit philanthropic division called Google.org, which has supported refugees (as of March 2023, "Ongoing support for refugees and displaced

[102] As of March 2023, the website is no longer active.

[103] This enabled people to embed 360º media into websites and apps.

people" is on the landing page). In an article published on World Refugee Day, Google's Vice President and President of Google.org Jacquelline Fuller (2020) writes that Google.org has "given more than $30 million in Google.org grants" since 2015 "to help provide emergency support and access to vital information and educational resources to more than one million refugees". In the same post, she also announced Google.org's support for UNHCR "with $550,000 Google.org and YouTube grants to provide refugees with necessary materials to endure the pandemic, digital skills training series and updates on Google Search in affected countries so people have access to reliable information at all times" (ibid.). Google.org was established in 2005 as a for-profit corporate division, a first of its kind, which has come to be known as 'for-profit philanthropy' (Reiser, 2009; Burns, 2019a, p. 146). As of 2023, it provides funding (£160 million grants to non-profits and social enterprises annually), "innovation" (makes its "research, open-source technology and products accessible to non-profits), and "technical expertise" (Google employees volunteer at non-profits or provide pro bono services through Google.org fellowship) (Google.org, no date). Reiser (2009, 2020) provides four main reasons behind Google's decision to establish Google.org as a for-profit entity rather than the conventional form of non-profit corporation: it provides Google.org with the freedom to invest in for-profit businesses and to generate returns (though this seems to not be part of Google.org's purpose anymore, at least not explicitly); it offers Google.org unfettered access to Google's resources (and presumably holding company Alphabet's [104]); it enables Google.org to avoid restrictions on political activities such as lobbying; and it shields its activities from public scrutiny and ensures a high level of control (e.g. if Google decides to end its charitable funds, it can). Most importantly, like the case of Google offering its services to *The Guardian* to increase its subscription revenue, Google can pursue philanthropic projects to sell its products and services (Reiser, 2009, pp. 2443–2444).

Sea Prayer can therefore be situated in this broader context where digital humanitarianism provides technology companies like Google an entry point into philanthro-capitalism. Virtuous VR is, to some extent, mutually beneficial for both

[104] Google was restructured in 2015. Google became a subsidiary of newly established holding company, Alphabet. Burns (2019a, p. 146) notes that the for-profit structure of Google.org as part of Google seems to have stayed the same after the restructuring.

Google and UNHCR: it enables Google to accumulate capital through its philanthropic ventures, while UNHCR can utilise digital technologies to engage potential donors and raise funds. The following sections elucidate how the concept of humanity—which is crucial to humanitarianism—is mobilised in *Sea Prayer* through reproductive futurism.

6.4 *Sea Prayer* as remediation of Alan Kurdi's photograph

Sea Prayer can be understood as remediation of Alan Kurdi's image, where remediation is defined as a refashioning of the photograph into another form of media (Bolter and Grusin, 1999)—in this case, a VR film. More specifically, VR films are presented as an improvement of 'older' media (i.e. photograph) for its claims to experiment with "a new immersive form – 360 illustrated narratives" (The Guardian, 2017b). After the photograph of Kurdi began to be widely circulated in social media and the news on 2nd September 2015, the image produced converging and diverging responses. Social media users, artists, and activists began to create and circulate new images based on the photograph (Adler-Nissen et al. 2020). Hashtags #CouldBeMyChild and #KiyiyaVuranInsanlik ("humanity washed ashore" in Turkish) trended on Twitter (Smith, 2015; Kaya, 2020, p. 1). The image quickly became an icon, transcending "their immediate or intended role or purpose" to represent bigger issues (Teer-Tomaselli 2021, p.32); in this case, Kurdi's photograph came to symbolise the common condition of risks of death and uncertainty that Syrian refugees faced (Sajir and Aouragh 2019, pp.561-562). Because of this effect, the photograph led to widespread calls for compassion and 'refugees welcome' sentiment across Europe. People started petitions, collected aid, and started volunteering, while state leaders like David Cameron, Stephen Harper, and Nicola Sturgeon expressed sorrow and sympathy (Burns 2015, pp.38-39)[105]. The constitution of the photograph of Kurdi as an emotional one generated its status as an image that has an emotional hold on an audience, towards which the audience *should* have an emotional response (Adler-

[105] At the same time, this was a deeply traumatic time for Kurdi's father, Abdullah Kurdi, who was being bombarded with media requests to relive and retell the story of his son's death (Khan, 2015). He was also accused of being a smuggler. It should also be noted that not all remediation of the photograph was supportive of refugees. For example, the French satirical magazine Charlie Hebdo, which was attacked by Al-Qaeda in January 2015, published a cartoon of Kurdi with the caption, "What would little Aylan have grown up to be? Ass groper in Germany" referring to the sexual assault incident in Cologne in 2015 (BBC News, 2016a).

Nissen et al. 2020).

Moreover, the media's assertion that the photograph has changed the discourse and policy surrounding refugees is itself a performative act——in that it is doing something, rather than an objective reflection of reality——reinforcing the photograph's status as transformative and emotive (Adler-Nissen et al. 2020, p.90; Burns 2015, p.38). In reality, even in the immediate aftermath of the circulation of Kurdi's photograph, the EU and other governments' policies and responses to refugees can hardly be said to be compassionate or welcoming (Adler-Nissen et al. 2020). Most notably, the EU used Kurdi's death to justify the EU-Turkey agreement (2016) by framing it as a 'humanitarian' response that would prevent deaths at sea, even though this was another instance of containment (Kaya, 2020; see Chapter 5 for details of this agreement). Refugees themselves are also being criminalised in recent years for 'smuggling' and 'endangering the life of their child', as in the case of an asylum seeker from Afghanistan whose six year old son died in the Mediterranean in November 2020 (he was acquitted in 2022) (InfoMigrants, 2022; Smith, 2022). Photographs of refugee children may hold "emotional potentiality", but are neither guaranteed nor more likely to evoke certain emotional reactions, nor likely to lead to certain policy outcomes (Adler-Nissen et al. 2020, p.82). There is no straightforward answer to whether a photograph like that of Kurdi's should or should not be published and to what end, and to what extent the photograph have had 'impact'. Nevertheless, what can be said is that *Sea Prayer*, as an example of virtuous VR, drew on the power of the original photograph.

Sea Prayer therefore draws on the iconic status of Kurdi's photograph to create a new experience in a different form of media. The text about the number of deaths at sea at the end reaffirms the significance of Kurdi's death as symbolic of the generalised conditions of Syrians fleeing conflict, violence, and death via the sea to seek safety in Europe. *Sea Prayer* additionally relies on the iconic status of Kurdi's photograph. It is likely that the user already knew about what happened to Kurdi, due to the media attention to his death. By releasing the VR version of *Sea Prayer* to "commemorate the second anniversary of the death" of Kurdi (The Guardian, 2017a) on 1st September 2017, *The Guardian* drew on this broader context.

Given the possibility that the user is aware of what happened to Kurdi, *Sea Prayer* is a prime example of a VR film that extends beyond the immediacy of the VR experience itself. The last scene in the film depicts Marwan's family on the beach before they set off on the journey towards Europe. There is a solemn tone as the father speaks, one that is filled with hope, uncertainty, and anxiety, amplified by the dark, purple hues of the scene on the beach. *Sea Prayer* ends with the father facing the sea that is "vast" and "indifferent", and praying for a safe journey for Marwan:

> All I can do is pray. Pray God steers the vessel true, when the shores slip out of eyeshot and we are a flyspeck in the heaving waters, keeling and tilting, easily swallowed.
> Because you, you are precious cargo, Marwan, the most precious there ever was.
> I pray the sea knows this.
> Inshallah.
> How I pray the sea knows this. (*Sea Prayer*, 2017)

The journey towards Europe is the father's attempt to secure a future for Marwan, the father's "most precious cargo". However, there is no resolution to the uncertainty of Marwan's future. There is no guarantee that the journey towards Europe will succeed——hence the film ends on a prayer——and yet this is the only way in which the father feels he can offer something of a future to Marwan. Knowing what happened to Kurdi in the Mediterranean makes *Sea Prayer* a particularly harrowing experience because it ends on a note of uncertainty through the father's prayer, yet I know that the journey could end in death. In 2015, there were over 3,770 people who died trying to cross the Mediterranean, "the most deadly region" in the world (International Organization for Migration [IOM], 2015). 60% of migrant deaths recorded occurred in the Mediterranean (Black, 2018, p. 58) [106]. The hopeful but mournful tone of the

[106] Apart from the unreliability of statistics on the number of people who die or go missing during migration, it is important to approach statistics on migration produced by IOM from a critical standpoint. Civil society organisations that started to count border deaths as a way of holding European states to account and demand a different approach to migration. In contrast, IOM's own data gathering project on migrant deaths, 'Missing Migrant Project' (launched in 2013), is part of its agenda of border control

father's voice and narration conjures up the photograph of Kurdi's body on the beach, simultaneously highlighting the futility of the father's prayers for a safe journey. I listen to the father play "a father's trick" of reassurance——"Hold my hand, Nothing bad will happen" (*Sea Prayer* 2017)——even though he himself knows that it is precisely a 'trick', and the user also knows it is likely a hollow promise. As a remediation of the photograph of Kurdi, *Sea Prayer* relies on and attempts to reproduce the emotional potency of the image using the affordances of VR technology.

6.5 "If only they saw. They would say kinder things, surely": 'Humanising' through individual stories

As discussed in Chapter 5, the idea that storytelling can be used to 'humanise' refugees also appears in *Sea Prayer*. In several interviews, Hosseini talks about his thinking behind this story as using it to challenge the 'dehumanisation' of refugees through dominant anti-refugee rhetoric and statistics: "Rhetoric and statistics and numbers have a way of dehumanising the issue [of displacement]. There are people living beneath these numbers and all of them have very specific stories" (Hosseini, 2018c). In another piece, Hosseini (2018b) wonders why there is no outrage against the continuing deaths of people in the Mediterranean. As he recounts the stories he heard from refugees in Lebanon and Italy, he writes: "I wish the world could hear what I am hearing. Stories are the best antidote to the dehumanisation caused by numbers. They restore our empathy. Each story I hear from a refugee camp helps me feel, bone-deep, my immutable connection to its teller as a fellow human. I see myself, the people I would give my life for, in every tale I am told" (ibid.). As a refugee himself, writing *Sea Prayer* as an illustrated book was therefore his way of telling a story of why people seek refuge.

This sentiment is also expressed in *Sea Prayer* by Marwan's mother. In the last scene by the beach, the father says: "I have heard it said we are the uninvited. We are the unwelcome. We should take our misfortune elsewhere." To which the mother

---

that is aligned with the objectives of states in the Global North (Heller and Pécoud, 2020). More generally, the logic of counting becomes part of a politics of rescue, whereby the number of people migrating is used to justify militarised 'rescue' operations, as well as a desire to render human movement visible to state control (Tazzioli, 2015).

responds: "'Oh, but if they saw, my darling, even half of what you have…If only they saw. They would say kinder things, surely'" (*Sea Prayer*, 2017). The mother's response reflects Hosseini's belief that hearing about people's lives, what they have had to endure and flee, would "surely" generate kinder responses than shunning them to go elsewhere, or to indifference to their deaths.

This idea that stories can counter the dehumanising effects of abstraction into numbers and particular metaphors are echoed by the Iranian-American novelist and writer Dina Nayeri, who fled Iran as a refugee:

> The thing is that makes it so easy for them [Trump voters] to dismiss all of these people [refugees] is because the other side has been very successful at aggregating these people to faceless numbers, a horde, a swarm, a flood. They use this language that's dehumanizing. And they've been successful at doing that. Because people don't think about individual people. They don't think, *Here is someone of flesh and bone, sitting across from me, afraid.* They don't see the heart beating through their chest. They don't see their fingers shaking. I think if they see those things, those human reactions from other people, they often behave with empathy. But, unfortunately, we don't get those one-on-one moments before we vote on horrifying policies. (Nayeri, 2019a; emphasis original)

Again, Nayeri's comment suggests that 'dehumanising' languages can (re)produce abstract ideas of who 'refugees' are, when in fact they are living, human beings with individual thoughts, feelings, and experiences. For Nayeri, if people could see with their own eyes the impact of having to flee one's home, the fears and anxiety, and the physical manifestations of what that does to a person, even Trump supporters would act with empathy.

There is evidence to support the claim that refugees are routinely represented in the media as numbers. For instance, in their analysis of Greek, German, and British press coverage on the 'refugee crisis', Fotopoulos and Kaimaklioti (2016, pp. 270–271) found that the 'refugees', 'migrants', 'immigrants', and 'asylum seekers' were most often collocated with numbers rather than specific words across all three presses.

Related to such focus on the number of people fleeing is the media's extensive use of water metaphors in relation to the movement of Syrian refugees in 2015-2016 (Fotopoulos and Kaimaklioti, 2016, p. 274; Porto, 2022). Much has been written about whether and how literature and storytelling can foster empathy, for instance through character identification and first-person narration (Keen, 2006). As mentioned in Chapter 4, Hunt (2007), for example, has argued that accounts of torture and 18th century novels in Europe fostered 'imagined empathy' and created new subjects of human rights. As the novels and accounts of torture demonstrated that people who had previously not been considered subjects of 'human rights' in fact share the same capacity to think and feel like 'us', the reader, more and more people started to see others as equal subjects of human rights through empathetic identification. However, critical perspectives have rightly raised important points about who tells the story, whose stories resonate more and why, and the limits of empathy as a 'solution' to political and structural issues (Boler, 1997; Potter and Stonebridge, 2014; Qasmiyeh, 2020; Darling, 2021).

The idea that stories will make people see refugees as 'fellow humans' and elicit empathy and compassion is also part of 'positive' humanitarian communication that emerged in the mid-1980s in response to the 'negative' humanitarian communication of the previous decades (Scott, 2014). While negative humanitarian communication emphasised the suffering of innocent and helpless 'victims' in the Global South that evoke pity and guilt in the audience in the Global North, positive humanitarian communication focuses on the beneficial impact of donors on the 'aid recipients'. People are "personalized by being named, being given a voice, or by being depicted in situations which may confound existing stereotypes" in an attempt to "reflect the individuality, dignity and agency of individuals" (Scott, 2014, p.149). Scott states that this personalisation confers greater agency on individuals, thus "humanizing" them as being more "like 'us'" and highlighting "the sense of shared humanity between themselves [the audience] and the subject" (ibid.). In a similar vein, using Chouliaraki's (2013) work as discussed in the Introduction (Section 1.4), the idea of humanisation through 'personalisation' can be understood as part of humanitarianism based on a politics of pity, other-oriented morality, and 'common humanity' through representations of distant suffering. In this way, Hossein and Nayeri's comments can be understood as an example of humanisation through 'personalisation', i.e.

presenting refugees as named individuals with a voice of their own and agency like 'us' (the audience), which creates a sense of common humanity that is assumed to lead to empathy.

While foregrounding common humanity appears to be beneficial for refugees, it needs to be understood from a critical perspective. There are dangers to assuming that it is inherently connected to social justice (Pedwell, 2014; Danewid, 2017; Darling, 2021). I am in no way denying the importance of listening to refugees and the power of literature to shed light on silenced voices (Nguyen, 2018; Qasmiyeh, 2020). Indeed, refugees tell stories to negotiate and refuse their constitution as subjects of rescue within humanitarianism (Espiritu *et al.*, 2022). There is, however, a need to be sceptical of the assumptions that, firstly, hearing the stories of a refugee will likely lead to the listener reacting with empathy, and secondly, increasing empathy towards refugees will make the world a more just place. In terms of the first point, as mentioned before, whether hearing someone's stories will increase empathy is contested. With regard to VR films in general, the empirical evidence on whether VR can increase participants' empathy is mixed (Bailenson, 2018). From a philosophical perspective, Manne (2018) has argued that recognising another as a fellow human being[107] is a "double-edged sword" (p.148) in that this recognition can potentially make them dangerous and threatening as much as relatable. Therefore, empathy and compassion do not automatically follow; they need to compete with other potential affective relations.

As mentioned in Chapter 2, my understanding of empathy follows those of Pedwell (2014) and Ahmed (2014) who understand it as an affective relation that is imbricated in transnational relations of power and not an individualised psychological state. In other words, empathy is not a subjective, psychological state possessed by an atomised individual, but refers to an affective relation that blurs the boundaries of

[107] Manne (2018, p.142) identifies four characteristics of recognising another as a fellow human being: "…having, or at least has having had, the potential to be *minded* in a similar way to oneself…develop and exercise various characteristically *human characteristics*, including…*rationality, agency, autonomy*…enter into and sustain various characteristically *human social relations*, including *marriage, parenthood, siblinghood, friendship, collegial relations* and…be the intelligible intentional object of others' *deep emotional attachments*". In this way, the characteristics are similar to the ones Scott (2014) discusses.

self/other or psychic/social (Pedwell, 2014, p. 1). This approach recognises that empathy cannot be assumed to be universal, or "straightforwardly 'good' or 'bad'" (Pedwell, 2014, p.14). Moreover, Hosseini and others' comments about the power of stories returns us to the limits of a humanising approach to displacement as it overlooks the conditions that require humanisation in the first place. As outlined in Chapter 4, such an approach sustains the unequal power relation inherent to the logic of inclusion. Consequently, only those who are deemed 'good' migrants/refugees by the audience or the 'host' society—for instance, contributing to or expressing love for the 'host' society, or being grateful (Nayeri, 2017, 2019b)—are welcomed and included.

More fundamentally, the idea that affective relations between refugees and people in 'host' societies are the main obstacle to humane treatment of refugees misses the major factor behind the enduring violence towards refugees. In *Border and Rule*, Walia (2021) incisively illustrates the ways in which borders are "a key method of imperial state formation, hierarchical social ordering, labor control, and xenophobic nationalism"[108] (p.2). Walia underscores the systems of power that produce categories like 'refugee' and 'migrant', which are not "a unified social groups" but "*state-regulated relations* of governance and difference" (p.2, emphasis original). In other words, it is borders that produce 'refugees' and 'migrants'. Understood in this way, the violent and deathly treatment of refugees is not a malfunction of the current world order but an inherent part of it (Khiabany, 2016). For example, as touched upon in Chapter 3, there are industries that profit from the surveillance, control, and deaths of refugees and migrants and conflict, such as security, arms, and prison industries; and agribusinesses engaged in land grabs that displace local populations and destroy their livelihoods (Walia, 2021, p.71). Climate change, to which overdeveloped countries contribute the most (Malm and Hornborg, 2014; Sealey-Huggins, 2017), is creating increasingly uninhabitable conditions in particularly in the Global South. In this way, foregrounding those structural factors and systems of power is as important as telling

[108] Walia (2013) proposed the analytic framework of 'border imperialism' in another book. She uses it to refer to four main "processes by which the violence and precarities of displacement and migration are *structurally* created as well as maintained": displacement due to unequal global power relations including capitalism and colonialism and the concurrent securitisation of borders, criminalisation of migration, reproduction of racial hierarchy through citizenship and nation-state building, and exploitation of migrant labour (Walia, 2013, chap. Introduction paras 6-7).

refugees' stories.

It is for this reason that Walia (2021) highlights the necessity to engage with "the *source* of this violence [border deaths] shaped through imperial, racialized, and spacialized control" [109] (p.108, emphasis original) rather than reproducing "an economy of suffering" (p.107) that purportedly generates empathetic identification through graphic depictions and dissemination of border violence and death. Situating the displacement and immobility of certain people within the wider context of global capitalist and imperialist relations also reframes the positions of refugees and migrants not as exceptions—as external to the nation-state system or capitalist relations—but integral to such relations. This might include how they are defined as 'others' against which citizenship (insiders) is defined (Tyler, 2013, p. 73); or included into capitalism by virtue of their exclusion as surplus populations who act as cheap and disposable labour (Rajaram, 2018; Bird and Schmid, 2021) or as those who provide unpaid labour (Tazzioli, 2022). Moreover, this approach challenges the assumption that people seeking refuge are coming from an 'elsewhere' (De Genova, Garelli and Tazzioli, 2018). Instead, 'here' is already connected to 'there' through global structures of power that Walia (2021) identifies.

Telling refugee stories is necessary, particularly if transformation at the subjective level is essential for social change (Hemmings, 2012). However, this is only one part of the story. Resisting an economy of suffering that creates hierarchies of deservingness and humanity requires attending to the conditions that create the need for 'humanising' in the first place.

6.6 Marwan and reproductive futurism

The photograph of Kurdi was deeply shocking and disturbing. However, Kurdi was not the only child to die while crossing the Mediterranean. Between 2014 and 2022, 1,046 children are recorded to have died trying to cross the Mediterranean, and 2015—the

[109] Her book interrogates a range of manifestations of interconnected systems of power: "drone warfare, military occupations, policing agencies, mass incarceration, reservations, ghettos, gentrification, capitalist trade agreements, special economic zones, sweatshops, land grabs, resource extraction, and temporary labor programs" (Walia, 2021, p.213).

year Kurdi died—recorded the highest number (279 children) (IOM, 2023)[110]. Despite the plethora of photographs in the media about the 'European refugee crisis' people encountered on a daily basis, something about Kurdi's photograph moved a lot of people.

The ways in which Kurdi's photograph was received—the rapid circulation of the image, the calls for compassion towards refugees, politicians' emotional responses—led some scholars to ask what led to the 'humanisation' (their recognition as fellow humans that merits a call for compassionate treatment and alleviation of their suffering) of a Muslim refugee. El-Enany (2016) points out that it was because Kurdi was a light-skinned (therefore not racialised as Muslim) child that people in the Global North were able to use the #CouldBeMyChild hashtag on Twitter to mirror their own children. His clothing (wearing clothes like 'ours'), his appearance (it was almost as if he was asleep), and the fact that his parents were not in the photograph enabled the viewers to position themselves as parents and to imagine Kurdi's life being similar to 'theirs' (Sirriyeh, 2018). In the process, the specificities of conditions that led to Kurdi's death are erased, whether that be his and his family's Kurdish identities, colonial histories, or imperial wars (El-Enany 2016, pp.14-15). Being a young child[111], Kurdi was received by the audience as a figure of innocence and helplessness (Sirriyeh 2018). This also relates to the discussions about the relationship between innocence, (universal) childhood, and humanity in Chapter 4. For those reasons, Kurdi's photograph became universalised into 'your child'—a generic, universal childhood—rather than 'this specific child'—i.e. a young, Syrian Kurdish child who became displaced and died due to specific factors. Sirriyeh (2018) also argues that Alan's death was used to appeal to the national identity of countries like the UK as having a 'proud history of welcoming refugees'[112] and for being a compassionate country.

[110] This is according to the IOM Missing Migrants Project's database, accessed on 30th March 2023.

[111] As Sirriyeh (2018, p.61) points out with reference to the reception of unaccompanied minors in the UK, refugees in their teenage years are often scrutinised and questioned within a culture of disbelief as they are not seen as 'vulnerable' or 'innocent'.

[112] This phrase has been used by the ex-Prime Ministers David Cameron and Boris Johnson, as well as the Home Secretary Priti Patel who has pushed for policies to illegalise and criminalise migration (Sirriyeh, 2018, p. 73; Patel, 2022).

Bearing those debates about the reception of Kurdi's photograph in mind, this section analyses the centrality of Marwan in *Sea Prayer* through the discussions regarding reproductive futurism (Edelman, 2004). Edelman (2004) argues that a figurative Child, which is capitalised to distinguish the idea from "the lived experiences of any historical children" (p.11), delimits the terrain on which social and political possibilities can be imagined and contested. He uses the term 'reproductive futurism' to describe how the figure of the Child is used to produce a common sense understanding of politics as attempts to guarantee a future, one that is reproduced through heterosexuality: "…the Child has come to embody for us the telos of the social order and come to be seen as the one for whom that order is held in perpetual trust" (p.11). The future becomes inconceivable outside of the figure of the Child; whatever the issue, "the struggle becomes no longer about rights or justice or desire or autonomy but about the future of "our" children." (Kafer, 2013, p. 28). As a queer theory scholar, he argues that queer people have been trapped into this ideological terrain of futurity, and that what queerness necessitates is a rejection of the future altogether. Such approaches are termed the 'antisocial' or 'antirelational' turn in queer studies. Contrary to such approaches, most notably Muñoz (2019) argued for understanding queerness as collectivity, futurity, and hope. He pointed out that the Child in Edelman's thesis is assumed to be white, even though the future he discusses is racialised and classed. For poor, racialised queer children, there is *already* no guaranteed future. Muñoz concludes, therefore, that it is necessary to create a future where such children get to grow up and thrive in the first place. Similarly, from the perspective of disability studies, Kafer (2013) concurs with Muñoz by saying that Edelman's Child is also "already healthy and nondisabled" (pp.32-33), as whiteness is historically bound up in health and hygiene, and racism, classism, and ableism are intricately connected.

In this section, I use reproductive futurism[113] to analyse the reproduction of a generic,

[113] There is one notable example of a migration studies scholar using the framework of reproductive futurism. Luibhéid (2013) uses the framework of reproductive futurism to examine the citizenship referendum in the Republic of Ireland in 2004, arguing that the arrival of pregnant migrants and their children were seen as disruptive and threatening to the reproduction of a particular national (in this case, white) future.

universal humanity. I argue that one of the reasons why Kurdi's photograph resonated with so many people was due to the mobilisation of reproductive futurism. He came to symbolise not a particular death but a generalisable death (Sirriyeh, 2018, p.67), a death of their 'own child' as the audience was interpellated as a parent/father (Adler-Nissen, Andersen and Hansen, 2020, p. 83). His death highlighted how a universal humanity failed to guarantee its own future. Similarly, the main message of *Sea Prayer* is the failure of 'us', a universal humanity to which we all belong, to stop the suffering of the Child who has no choice but to go on a dangerous journey like Kurdi. At the same time, Adler-Nissen et al.'s comment in relation to Kurdi's death that, "What is at stake is thus not only other children in danger of drowning as they venture across the Mediterranean Sea, but future itself" (2021, p.88) is only partially true. As the earlier discussions about reproductive futurism bring to the fore, there is a deeper question of *whose future* and therefore *whose humanity* is at stake. As Chapters 4 and 5 noted that virtuous VR's post-humanitarian and depoliticising tendencies are not all-encompassing, there are two contesting forces manifest in *Sea Prayer*: on the one hand, there is an attempt to constitute Marwan as the Child through the father's narration, thus attempting to stabilise a future that belongs to 'all of us' without attending to the specificities of why Marwan's future is at risk. On the other hand, *Sea Prayer* also presents a story of why someone may flee Syria to seek safety in Europe despite it often being a dangerous journey, highlighting the uneven distribution of vulnerability (Butler, 2009) to harm, death, and future. Reproductive futurism also relates back to the figure of the 'universal child' discussed in Chapter 4, as *Clouds Over Sidra* also appeals to the notion of a lost childhood and therefore a future being lost. Ultimately, this mobilisation of the universal Child through virtuous VR like *Sea Prayer* helps humanitarian actors like UNHCR raise funds and engage its audience in the increasingly competitive and marketised humanitarian arena (Burns, 2019a, 2019b; Barnett, 2023). It is also what makes virtuous VR so appealing to corporations: even though they are one of the main actors who perpetuate and benefit from the neoliberal order that relies on a hierarchy of humanity, mobilisation of a generic humanity enables them to claim to be 'doing good' while continuing to prop up the current world order.

Sea Prayer presents Marwan as both a specific and a generic child[114]. He is a specific child in the sense of being a Syrian child whose childhood has so far been mired in conflict and death, a life to which not everyone is equally vulnerable (El-Enany 2016; Danewid 2017). The film communicates this unevenly distributed vulnerability to death through the contextualisation of the father's decision to flee Syria. Unlike *Clouds Over Sidra* (which depicts life in Za'atari refugee camp) and *Refugees* (which depicts the arrival and departure of migrants from Lesbos), *Sea Prayer* provides some contextualisation to the father's decision to flee. In his letter addressed to Marwan, he introduces the user to Syria as a place of peace and harmony, which then became engulfed in "spitting bombs", "starvation", and "burials" after the "protests" and "the siege" (*Sea Prayer*, 2017). The father mentions the series of events, alluding to just how quickly circumstances of life can change:

> First came the protests.
> Then the siege.
> The skies spitting bombs.
> Starvation.
> Burials.
> These are the things you [Marwan] know. (*Sea Prayer*, 2017)

There is a stark contrast between the first two scenes, depicting the idyllic life and peaceful coexistence in Syria, with the last two scenes depicting the protests followed by the siege[115]. This contrast is emphasised even more through the colours and sounds. The first two scenes are bright and colourful whereas the last two scenes are saturated in grey, black, and dark purple, symbolising destruction, grief, and the all-consuming uncertainty. Sounds of life permeate the first two scenes——wind blowing, birds and insects chirping, roosters crowing and cows mooing, stream flowing, people talking, Adhan (Muslim call to prayer), cars driving past——whereas the third scene is dark and chaotic with layers of people shouting in megaphones, sound of bombs exploding and a low-pitched sound as if my ears are ringing after an explosion, dogs

[114] I borrow those terms from Sirriyeh (2018) who use them to discuss Kurdi.

[115] The siege, which as the result of clashes between the Assad government and opposition forces, lasted for three years between 2011 and 2014, although this is not mentioned in *Sea Prayer*.

barking, helicopters buzzling, and an ambulance rushing by. The last scene by the beach features melancholic violin music in the background while I hear the waves crashing against the beach. For the people preparing for the boat journey including Marwan's father, this sound signifies "how deep the sea, and how vast, how indifferent" (*Sea Prayer* 2016) it is, a power from which the father cannot protect Marwan. Overall, although there is some contextualisation of the Syrian war, the user gets a sense that the protests and the siege happened spontaneously, as the historical and political factors behind the protests or the enduring conflict are not mentioned.

Consequently, although *Sea Prayer* sheds light on the specificities of the Syrian war to some extent, Marwan's life under conflict comes to represent the plight of refugees in general. On the beach, Marwan's family is joined by "Afghans and Somalis and Iraqis and Eritreans and [other] Syrians", who are all "in search of home" (*Sea Prayer* 2016). Although they speak "in tongues we [Marwan's family] don't speak" (ibid.), they are all gathered on the beach for the same reason: "in search of a home", of safety, for which they are all risking their lives on this boat journey. In this way, Marwan's life under conflict is just one example of why people may flee their homes and seek safety in Europe. The future that he embodies is that of refugees, which is at risk for various reasons including conflict as in the case of Syrians. However, seen through the framework of reproductive futurism, the specificities that shape the kinds of future refugees (can) have become diluted in favour of the Child who must be saved from conflict, as embodied by Marwan.

Unlike Sidra in *Clouds Over Sidra*, in *Sea Prayer*, I do not encounter Marwan as a child with interests, thoughts, and dreams of his own. Marwan is first and foremost a child as seen through the eyes of the father, and an innocent victim of a conflict (Malkki 2010). As Malkki (2010) and Burman (1994) point out, children are often historically and politically abstracted from their particular contexts in the humanitarian imaginary. This abstraction is even more pronounced in *Sea Prayer* as the user has little direct contact with Marwan himself; rather, the film hinges on the construction of Marwan as a beloved child through the father's perspective. Marwan only comes to life through the father's narration, and I only know him as a child of the narrator who only knows life under conflict. Marwan makes an appearance only in the last scene by the beach

as he is blissfully asleep in the father's arms, a gesture that reinforces Marwan as a small child who is unaware of what is about to happen (therefore innocent), who requires fatherly protection from a violent and uncertain world. As mentioned before, the father's narration presents a clear sense of temporality, moving from a peaceful past that Marwan has never known (scene 1 on Marwan's grandfather's farmhouse and scene 2 on peaceful and bustling Homs), to a conflict-ridden present that robs Marwan of his future (scene 3 on the Syrian war) and a future full of uncertainty (scene 4 by the beach). The father tells Marwan about the idyllic and harmonic past in Homs that has been lost to war, violence, and death. The worsening conflict and its impact on Marwan's life is vividly depicted in the narration, the scene that is saturated by dark colours, and the sounds of shouting, bombs, and helicopters:

> You know a bomb crater can be made into a swimming hole.
> You have learned dark blood is better news than bright.
> You have learned that mothers and sisters and classmates can be found in little triangular patches of sunlit skin, shining in the dark, through narrow gaps in concrete and bricks and exposed beams. (*Sea Prayer*, 2017)

In this scene, Marwan is constituted as a child who only knows life under conflict and violence, and someone who must be protected (by the father). The father grieves the beauty and the peace of home that his son will never get to experience, and Marwan's—and countless others'—childhood lost to conflict. The screen before the end-credits notes Kurdi's death as an inspiration for *Sea Prayer*, and states the number of deaths continuing to increase after his death. Marwan's life becomes representative of children's experiences of the Syrian conflict, and the plight of those fleeing towards Europe. Marwan's future becomes every child's future becomes every refugee's future. But the reasons why Marwan and refugees' futures are at risk are not engaged, whether that be the crop failure and drought, the bombing of Syria by the UK, France, the US, and Russia; the enduring legacies of the French mandate of Syria (1920–1946) in its political life (Fildis, 2011; Munif, 2020); or the opposition to Assad's neoliberal and authoritarian policies (Daher, 2018; Munif, 2020). The primary message of *Sea Prayer* is that this Child's future must be saved. The fact that the user encounters Marwan through the father's eyes and voice interpellates the user as a

protector of Marwan. Marwan becomes the Child because he is “amenable to a population who can see them as their own children - as children that can slot into a national family [in this case a ‘family of humanity’ is more apt] and be protected, cared for, or grieved for by benevolent, white, European parents” (Turner, 2020, p. 183). In those ways, Marwan acts as the Child in Edelman’s formulation, appealing to the idea of protecting the future of ‘our’ children. This is, however, a delicate balancing act. For the user to see themselves in the future that they are being called on to protect, the future of *humanity* that Marwan represents is one that does not engage with (unequal) global relations of power that protects certain people’s future while rendering that of others disposable.

6.7 The figure of refugee fathers and reproductive futurism

While refugee men feature predominantly in *Refugees*, *Sea Prayer* features a specific type of man: refugee fathers. Fatherhood is a central element in the film, as the story in the form of a letter is written and told from the perspective of Marwan’s father. Firstly, this is most likely due to the fact that Abdullah, Kurdi’s father, was the only one to survive the journey and went on to tell the story of what happened. Secondly, it is also likely due to Hosseini’s intense emotional response to Kurdi’s photograph, which in part came from his own experience of being a father: “I was gutted…I tried to imagine, as a father, what it must be like to see viral photographs of your deceased three-year-old lying face down on the sand at the water’s edge and being lifted into the arms of a stranger” (Hosseini, 2018c). If emotions are social practices generated through various encounters with the world (Ahmed, 2014), the emotional attachment and relationship that many parents have with their children, as well as Hosseini’s personal attachment to his own children, Hosseini’s subject position as a father informed his decision to write *Sea Prayer* from the perspective of Marwan’s father. Hosseini’s position as a father—and likely his own experiences of displacement—shaped how he was moved by the encounter with Kurdi’s death and photograph. Hosseini’s reaction constituted Kurdi’s photograph as a highly emotional one that called on him as a father himself, which informed his decision to centre the figure of a refugee father in the remediated form of *Sea Prayer*. Referring to the book version of *Sea Prayer*, Hosseini has said he hopes the readers can:

> …imagine the desperate circumstances that would force a parent to take their children and to cross the sea knowing how many people have died attempting that same crossing. To take the people that they love and cherish the most and put them on these unsafe, unseaworthy crowded boats that are manned by smugglers who have no regard for human life, with absolutely no assurance that you will make it to the other side (Hosseini, 2018a).

Sea Prayer thus attempts to constitute audience as fathers: to follow the lives of the father and Marwan in Syria from peace to war, and to feel for Marwan and children like him as someone I as a user should be protecting. In this way, within the framework of reproductive futurism, the centrality of fatherhood contributes to the stabilisation of Marwan as the Child.

In *Sea Prayer*, not only the poetic first-person narrative written by Hosseini but the emotive narration by the actor Adeel Akhtar reading out the letter to Marwan also communicates the love and care the father feels for his child. Against the background of refugee men's dominant construction as potential terrorists, economic opportunists, and sexual predators (Innes, 2010; de Hart, 2017; Esses, Medianu and Lawson, 2017), and against the tendency to understand Muslim men and families through the framework of patriarchy (Naguib, 2018), the fatherhood represented in *Sea Prayer* symbolises 'paternal caregiving' (ibid.). In her research, Naguib interviewed Syrian refugee fathers who had sought asylum in Norway, and found that they all expressed a sense of obligation as a father to protect their children, as well as attempts to negotiate changing familial relations and gender roles (Naguib, 2018, p. 290). Moreover, refugee men as 'fathers and providers' are one of the three norms of refugeehood and masculinity that Allsopp (2017) found in her analysis of accounts of the 'European refugee crisis'. This is the figure of refugee men as caring and nurturing figures. Allsopp (2017) argues that this figure of refugee fathers as a protector of the family who care for their children elicits sympathy and generates a "more humanitarian agenda" against the backdrop of securitisation of refugee men through the figure of (potential) terrorist (p.163). For this reason, NGOs like Save the Children and Médecins Sans Frontières have used images of fathers with their children in their campaigning on the European 'refugee crisis' (pp.163-164). She does not elaborate

on how the figure of refugee fathers provide a more humanitarian agenda apart from mentioning that such representations elicit empathetic reactions; I suggest that this is because of its reliance of reproductive futurism. The figure of refugee fathers is palatable to a more humanitarian agenda because fathers are represented as protectors and saviours of the future of a generalised humanity that is symbolised by the Child. The main issue at stake becomes first and foremost the protection of children and their future *in general*, becoming *our* (shared) future. At the same time, this attempt to stabilise the Child through Marwan as seen and constructed by the father is in tension with Hosseini's attempt to portray the factors that *specifically* put the future of Syrians and refugees more broadly at risk in the first place. This mobilisation of generic humanity through the Child is integral to virtual VR on displacement as it serves as a basis for humanitarian organisations to raise funds and profile and for corporations to pursue profit under the guise of philanthropy.

It is significant that the father is never named, only his son. This generates two competing effects. One the one hand, because of his namelessness, the father comes to represent the plight of Syrians as a whole (Hamouda, 2021), as well as that of Afghans, Somalis, Iraqis, and Eritreans who are all anxiously waiting on the beach for the boat to Europe in the last scene. The narrative's subject extends from Syrian refugees to everyone fleeing towards Europe who share the same anxiety, fear, and hope for a better future. Hosseini himself has said that he wrote *Sea Prayer* not only to "keep alive the memory of Alan Kurdi" but also so that "it serves as a reminder of the unfathomable desperation that forces families to risk all they have in search of hope and safety on another shore, across waters" (UNHCR, 2017). On the other hand, the namelessness of the father stabilises the Child by privileging the universalising figure of fatherhood in the narrative—fatherhood as the one who protects his children and family at all costs—at the expense of why the futures of Marwan, as well as that of Afghan, Somali, and Eritrean refugees, are specifically at risk.

The narrative structure of *Sea Prayer* works in tandem with the figures of the refugee father and the Child. In the analysis of the illustrated book version of *Sea Prayer* (whose story is identical to the VR version), Hamouda (2021) identifies two parts to the structure of the story: the father's "fall from agency to passivity", from an "actant"

to a “victim” (p.165). In the first part before the uprisings and the outbreak of the conflict, the father depicts Homs as an idyllic and peaceful place full of life. In the second part, Homs is transformed into a place of bloodshed, violence, and death, pushing the memories of an idyllic Homs further into the past. In this transition, the father loses agency and struggles to exercise control over his life, and, most importantly, his ability to protect Marwan becomes increasingly constrained. The decision to go to Europe via the sea is therefore the father’s attempt to regain control over his and his family’s life, and to secure a better future for themselves (Hamouda 2021) but primarily for Marwan’s sake. The trajectory of the story and the sentiments expressed in *Sea Prayer* reflects the wish for control over their lives that Naguib (2018) found in her research with Syrian fathers who sought asylum in Norway. In their narratives, the fathers grapple with their lack of control over their lives, and hold onto the idea that despite this they can, and must, control some aspects over their lives for the sake of their children (Naguib 2018, p.291). Similarly, *Sea Prayer* portrays the increasing inability of the father to fulfil the role of the father as a provider and protector. Drawing on the aforementioned association between fatherhood as a provider and protector, the father’s loss of agency and inability to guarantee Marwan’s future become even more devastating. *Sea Prayer*’s primary message is the need to protect the future of children like Marwan. Using the framework of reproductive futurism, I have illustrated how this reduces the terrain of engagement to attempts to guarantee the Child’s future, rather than an engagement with the underlying factors that cause displacement.

6.8. Conclusion: Whose future?

In this chapter, I used the framework of reproductive futurism (Edelman, 2004) to suggest that *Sea Prayer* uses the figure of Marwan and the unnamed father to interpellate the user as a parent/father to highlight the failure of ‘us’—a generic humanity to which everyone belongs—to protect a generic figure of the child. This presents a tension. On the one hand, the film constructs a notion of the future that belongs to all of us through the Child, Marwan. This fails to question why Marwan’s future is specifically at risk; or, why not everyone is equally vulnerable to being displaced because of the modern/colonial world order. On the other hand, *Sea Prayer* does provide more contextualisation than the other films analysed in this thesis as to why people flee Syria. However, ultimately, like *Clouds Over Sidra*, *Sea Prayer*

elucidates how virtuous VR on displacement does not depart from conventional representations of refugees that reduce them to feminised and innocent humanity. Although Marwan's father is a Syrian man, he remains nameless and his primary subject position is a father. As Sirriyeh (2018) points out in relation to why Kurdi's photograph resonated so much, this abstract generalisability of Marwan's father, where the primary role of fathers is protectors of child and their future, facilitates the mobilisation of a generic humanity through the Child.

This mobilisation of generic humanity through the Child plays two important roles. Firstly, it is integral to the marriage between philanthro-capitalism and digital humanitarianism. Virtuous VR uses the notion of a generic humanity to 'humanise' refugees so that corporations like Google can claim to be 'doing good' through VR technology. This notion of humanity is also integral to the practices of humanitarianism (Ticktin, 2011), and for organisations like UNHCR to use new technologies to represent refugees in 'better' ways. They can present their brand as being at the forefront of 'innovation' and to make itself stand out in its fundraising and awareness-raising activities. In Section 6.3, I discussed how *Sea Prayer* demonstrates Google's attempt to expand its market through its entry into the fields of journalism and humanitarianism. The relationship between Google, *The Guardian*, and UNHCR shows that Google has used virtuous VR as an entry point to strengthen its ties with those organisations to ultimately deepen their reliance on Google's services and products. Under neoliberal capitalism and the increasing marketisation of humanitarianism, virtuous VR is a convenient way for technology companies to present themselves as 'doing good' for refugees in the name of philanthropy and humanitarianism (Burns, 2019a). Given Google's sponsorship of immersive journalism at the time, *Sea Prayer* can be understood as part of this larger project to capture more of the journalism industry and to shape its future through notions like 'innovation'. Even though corporations like Google are firmly part of the neoliberal world order, they become part of 'us' who are tasked with securing the future of 'our' children through their involvement in virtuous VR.

Secondly, a generic humanity is also essential to the persistent framing of the issue of displacement as first and foremost a humanitarian issue. I have shown throughout this

thesis that the figure of children continues to play a key role in a humanising approach to displacement, contrary to VR enthusiasts' claims that the technology presents a new way of representing refugees. In the case of *Sea Prayer*, the association between children and the future produces a generic humanity, thereby obscuring the question of whose future is at risk specifically, and why. Humanisation based on a logic of inclusion rests on the assumption that the main issue is refugees' expulsion from humanity, for example through their reduction into statistics. For Hosseini, being exposed to individual stories that tell the reality of being a refugee has the potential to challenge this 'dehumanisation'. There is no doubt that refugees telling their stories is important; as Qasmiyeh (2020) writes, displacement is an embodied experience, and refugees telling their own stories is the practice of writing "the concrete" (ibid., p.57). However, refugees' expulsion from humanity is not an anomaly that can be remedied by attempting to enlarge the circle of humanity through sentimental education as Rorty (1993) claimed. The modern/colonial order requires a hierarchical humanity—the overrepresentation of Man, in Wynter's (2003) words—to sustain its uneven distribution of wealth and life chances. As Danewid (2017) and Walia (2021) have argued, as long as displacement is disconnected from global systems of power that cause it in the first place, it remains a humanitarian issue that invites charity, empathy, and generosity. Therefore, attempting to 'humanise' refugees without questioning the humanity into which refugees are being included—one that is rooted in modernity/coloniality—will result in the perpetuation of the modern/colonial world order, while actors who benefit from this very world order claim to make a difference in the name of humanitarianism or philanthropy. What I want to consider in the next chapter, then, is what emerges from questioning humanity as a collective subject in relation to virtuous VR and refugees.

7. Conclusion

This thesis set out to study the concept of humanity and virtuous VR films on displacement that emerged in the mid-2010s. Virtuous VR on displacement emerged within the broader context characterised by increasingly restrictive migration controls and policies (particularly those from the Global South moving to the Global North) since the 1990s; growing marketisation of humanitarianism and the increasing uses of digital technologies by humanitarian actors since the 1990s and early 2000s; the move towards 'positive' (since the 1980s) and post-humanitarian (since the early 2000s) representations of refugees; and the global hegemony of neoliberal capitalism (the main beneficiaries of which are the financial and technology sectors) and its consequent crises in the mid-2010s. My interest was not to investigate whether VR films on displacement actually increase empathy—which has been the subject of an increasing number of empirical studies (e.g. Schutte and Stilinović, 2017; Shin, 2018; Alberghini, 2020)—but to trouble the assumption that a recognition of common humanity and cultivation of empathy are necessarily 'good'. Positing humanity as a universalised, collective subject, I sought to understand how the concept of humanity manifests and what it does through virtuous VR on displacement, and what purposes specific conceptualisations of humanity serve. To this end, I set out to answer the following three research questions:

1) What conceptualisations of 'humanity' undergird VR films on displacement?
2) How do they manifest through VR films?
3) What are the implications of such conceptualisations of humanity?

7.1 Virtuous VR on displacement and mobilisation of a generic humanity

Throughout this thesis, I have argued that a generic, universal humanity undergirds VR films on displacement: one that emphasises the fundamental and essential commonality of people as human beings, and the recognition of which is assumed to lead to empathy towards refugees. This conceptualisation of humanity disregards or minimises the differential distribution of humanity, such as the various power dynamics that shape who is seen and treated as a human being in the first place. I termed an approach to displacement that depends on this conceptualisation of humanity as a 'humanising' approach. Importantly, this approach is based on a logic of inclusion,

whereby refugees are assimilated into dominant genres of the human (Wynter, 2003). Who is defining the genre of the human and who has the power to include are not questioned. Using the modernity/coloniality framework from decolonial theory, I also highlighted how hierarchies of humanity are essential to the current world order that depends on, for example, racialised and gendered divisions of labour, exploitation and dispossession, and constructions of insiders and outsiders to maintain the nation-state system. Through conjunctural and embodied analyses of four VR films about displacement from the Syrian conflict, I analysed how virtuous VR films on displacement mobilise a generic humanity, and thus seek to 'humanise' refugees. Importantly, the analyses involved looking at both the content of the films and the technological affordances of VR technology.

7.2 Innocent and feminised humanity, technological disembodiment, and experiential dissonance

In terms of representations of refugees, children emerged as a common theme across the three films of *Project Syria* (Chapter 3), *Clouds Over Sidra* (Chapter 4), and *Sea Prayer* (Chapter 6). Despite claims by VR enthusiasts that VR technology provides an opportunity to represent refugees in more 'nuanced' ways (Milk, 2015; Arora, 2019), virtuous VR films on displacement continue to invoke a generic humanity that is reliant on oft-critiqued representative trope of 'refugeewomenandchildren' (adapted from Enloe, 1991; Turner, 2019a, p. 601) where women, femininity, and children elicit notions of victimhood, dependency, and innocence. In Chapter 4, refugee girl Sidra and the prominence of young children throughout the film construct a feminised and innocent humanity. Although the film is driven by Sidra's narrative and she is presented as someone with a voice and agency, the mobilisation of a feminised, innocent humanity attempts to 'include' refugees into a hierarchy of humanity that necessarily entails a politics of deservingness. In Chapter 6, I used the framework of reproductive futurism (Edelman, 2004) to analyse how Marwan comes to represent 'our' future as a universalising figure of the child. In this way, it is not refugees' future that is specifically at risk but the future of humanity at large. The unnamed father's storytelling also interpellates the user as a father/parent, calling on them to protect 'our' children without attending to the factors that put specific people's lives at risk in the current global order. In contrast, *Refugees* (Chapter 5) predominantly features men who are racialised as Muslim, who do not fit the feminised, innocent humanity invoked

in the other three films. Proposing the notion of experiential dissonance, I noted that this and the fact that *Refugees* is a piece of journalism makes it difficult for it to explicitly engage in a humanitarian agenda like the other films. This raises the important question of how to reconceptualise the relationship between refugees and humanity beyond one that is feminised, innocent, and depoliticised humanity, which I engage in Section 7.5 below.

In addition to the representations of refugees, the technological affordances of VR are used to mobilise a generic humanity. I considered two instances of technological affordances: technological disembodiment and experiential dissonance. In *Clouds Over Sidra* (Chapter 4), I discussed how the erasure of my body in the virtual world is connected to the attempted erasure of power relations that shape who is more vulnerable to being displaced. Technological disembodiment reflects the persisting discourse of VR as technology that enables transcendence of the body and various forms of 'difference' (Balsamo, 1997; Green, 1999), and presents a particular epistemology of displacement based on a generic humanity. In this epistemology of displacement, everyone who is part of 'humanity' is vulnerable to being displaced, and displacement is packaged as an experience divorced from particular political and historical locations. As a result, virtuous VR is presented as technology that enables empathetic identification with refugees through a self-centred experience of displacement. In *Clouds Over Sidra*, technological disembodiment works in tandem with the innocent humanity of Sidra and other refugee children, who appeared in the film so that the viewers could imagine "what happens to these unfortunate people could also occur to our kids" (Arora and Jones, 2017). In *Refugees* (Chapter 5), I used the concept experiential dissonance to describe how the film attempts to steer the user towards a more 'humane' perspective on the 'European refugee crisis' even as it creates space for them to 'make up their own mind' (Scopic, no date c). This meant that, although the creators' intention was to cultivate a perspective on the 'refugee crisis' based on a generic humanity, this does not necessarily translate to the users as they are not passive recipients of authoritative messaging.

7.3 Implications: What is this humanity 'good' for?

In terms of the implications of mobilising a generic humanity and undergird a

humanising approach to displacement, there are three arguments that I would like to reiterate. First, I showed in Chapters 4, 5, and 6 that a humanising approach to displacement is based on a logic of inclusion that seeks to include refugees into the hegemonic genre of the human, rather than dismantling it altogether. For example, the association between innocence and humanity symbolised by the figure of children produces a never-ending search for purity (Ticktin, 2017) that reifies a division between those who are considered innocent enough to be part of humanity (therefore deserve to be supported, such as refugee children) and those who are not (such as refugee men as discussed in Chapter 5). Including refugees into humanity without questioning who is defining the human and for what purpose risks perpetuating power relations that sustain the modern/colonial world order.

Second, I used *Project Syria* (Chapter 3) as a springboard to offer a conjunctural analysis of VR technology from a political economy perspective. I weaved in this perspective in the subsequent chapters, centring questions about the vested interests and power dynamics behind virtuous VR on displacement. Overall, I emphasised that the generic humanity mobilised through virtuous VR films on displacement is not 'good' for refugees but for technology companies seeking profits and new markets, as well as a host of other actors who benefit from the border-industrial complex and those seeking to survive in the increasingly marketised field of humanitarianism. Each chapter offered insights into specific actors: the border-industrial complex and the military in Chapter 3; Vrse (now Within) and WEF in Chapter 4; journalism industry in Chapter 5; and Google, *The Guardian*, and UNHCR in Chapter 5. Importantly, I claimed that the mobilisation of a generic humanity is crucial for the maintenance of the dominant genre of Man and for those who profit from the modern/colonial world. The mobilisation of a generic humanity enables corporations with vested interest in VR technology to claim to 'do good' while reproducing the overrepresented Man (Wynter, 2003) upon which the current neoliberal order depends. After all, who can deny that 'humanising' refugees or having empathy towards others is not good? My thesis has shown that virtuous VR on displacement uses such 'common sense' to present VR as technology that is good for society, thus justifying further expansion and profit-making.

Third, mobilisation of generic humanity is essential to the persistent framing of

displacement only or primarily as a humanitarian issue. As I mentioned in the conclusion of Chapter 4 and in Chapter 6 in relation to the limits of 'humanising' refugees through storytelling, a humanising approach to displacement can only ever operate within the terrain of empathy, help, and charity as a response to displacement (Danewid, 2017; Walia, 2021). In this understanding, displacement is disconnected from the modern/colonial world order comprised of the border-industrial complex, imperial warfare, environmental destruction, data colonialism, and neoliberal capitalism, and becomes a matter of relieving suffering. This epistemology of displacement, to which a generic humanity is integral, not only obfuscates the politics of displacement but also enables the constellation of actors who benefit from this current world order to detach themselves from it. As a result, in a context where humanitarianism has become the perfect marketplace for corporations—especially technology companies—they can promote and sell their products in the name of philanthropy (Burns, 2019a).

7.4 Contributions of this study

My study makes a unique contribution to both critical literature on 'virtuous VR' or VR 'for good', and the literature discussing the relationship between the concept of humanity and refugees. Previous studies tend to subsume the critique of virtuous VR on displacement under a general critique about virtuous VR (Bollmer, 2017; Nash, 2018; Rose, 2018; Nakamura, 2020), or examine displacement but not through the concept of humanity (Irom, 2018; Gruenewald and Witteborn, 2020). As I have explained above, attending to the concept of humanity elucidates how a generic, universal humanity is essential to 1) virtuous VR to claim 'good' by framing displacement primarily as a humanitarian issue, and 2) for advocates of VR technology to claim to 'do good' by 'humanising' refugees through this technology. By theorising a 'humanising' approach to displacement that depends on the mobilisation of a generic humanity based on a logic of inclusion, I also contribute to literature that critically investigates the dynamics that shape humanity and the implications 'humanising' refugees (Danewid, 2017; e.g. Kirkwood, 2017; Turner, 2020; Darling, 2021).

Moreover, applying decolonial theory to virtuous VR on displacement, my thesis challenges studies that take 'humanisation' for granted without defining what it means

or why it is mobilised, or those that assume ‘humanisation’ to be inherently good in opposition to ‘dehumanisation’. In this vein, I contribute to literature that foregrounds the relationship between coloniality, colonial histories, displacement, and the category of the human (Danewid, 2017; Mayblin, 2017; Rodríguez, 2018; Walia, 2021).

I also offer an original approach to the study of virtuous VR films on displacement. The findings discussed above are grounded in both analyses of representations of refugees and how VR technology shapes and is shaped by the world. Through experiential and conjunctural analyses, I offered insights that cannot be gained by simply analysing the content of the VR films, and contribute to literature on representations of refugees as well as critical studies of technology, particularly its role in journalism (Chapters 3, 5, and 6) and humanitarianism (Chapters 3, 4, and 6).

Finally, by pursuing such an approach to virtuous VR films on displacement and a focus on the political economy of VR technology and migration, this thesis has demonstrated that one implication of the mobilisation of a generic humanity through VR technology is that it serves the interest of the beneficiaries of neoliberal capitalism. This is a world order that depends on a hierarchy of humanity: a genre of the human that organises a modern/colonial world based on extraction, massive levels of energy consumption, precarious labour, and value extraction from the Global South to the Global North (Rajaram, 2018; Graham and Anwar, 2019; Bird and Schmid, 2021; Taffel, 2021). Corporations, particularly technology companies, use virtuous VR to cultivate new spheres of human life for extraction and profit-making, and drive forth a form of capitalist development that contributes to widening inequalities, climate destruction, and war profiteering that catalyse or exacerbate processes of displacement and immobility. Faced with a crisis of neoliberal capitalism from the mid-2010s (Gilbert and Williams, 2022), mobilisation of a generic humanity through virtuous VR provides those invested in the neoliberal system to appear to be ‘doing good’ on the mediatised issue of refugees, while instrumentalising the issue of displacement for their own gain. This thesis, therefore, presents one example of what is done “in the name of humanity” (Feldman and Ticktin, 2010).

7.5 Concluding thoughts

This thesis did not examine how to use VR in ways that better support refugees or what is realistic to include in VR films that last under 10 minutes. Tackling those questions would have meant taking the assumption for granted that corporations and humanitarian organisations should be using VR technology. Rather, my interest was to show how a particular concept of humanity is mobilised through virtuous VR and to what effect. Scholars who take a critical approach to VR agree that how VR has been used, and ways of engaging with the world that it promotes, tend to privilege feeling (more or differently) over understanding or action towards systemic change (Rose, 2018; Nakamura, 2020). As I discussed in Chapter 5 with reference to Hemmings' (2012) concept of affective dissonance, feelings and experience can be a politicising force but it is not guaranteed. There cannot be a "technical fix" to deeply political issues (Benjamin, 2019, p. 115). My arguments also suggest that, even if VR technology could be used in ways that further understanding over feelings, the military and the border-industrial complex in which VR technology continues to be implicated cast doubt on the extent to which it can ever be used for "counter-hegemonic" purposes (Rose, 2018, p. 144) if those involved in the production process remain the same.

In this concluding section, I return to the following questions I raised in the main chapters. In Chapter 4, I asked what it means to reconceptualise the well-established relationship between refugees and a feminised, innocent, and depoliticised humanity. In Chapter 5, I asked what emerges from questioning humanity as a collective subject in relation to virtuous VR and refugees. In thinking about those questions, I turn to Çubukçu's (2017) article on the liberal conceptions of 'the human' in human rights. Her perspective of 'thinking against humanity' and considering what may be gained from abandoning "the desire for humanity as a collective subject" (p.253) is instructive in rethinking the relationship between refugees and humanity.

Who speaks for the human?

My thesis has shown one way in which 'humanisation' is put to work by powerful actors to maintain a world order from which they benefit. The critical question, then, is who is speaking for and defining 'the human'. In a world that often attempts to 'give voice to the voiceless' without considering that nobody is actually voiceless (Nguyen, 2018)—they are simply ignored or silenced—refugees themselves are increasingly carving out

space for themselves as artists and knowledge-producers (Brankamp and Weima, 2021, p. 6; Espiritu *et al.*, 2022). Qasmiyeh (2020), who writes poetry based on his experience of living in the Baddawi camp in Lebanon, states that "it is the body—the body of the refugee, her skin—that becomes the parchment, the very piece of paper or skin, that holds the specificities of being a refugee, of being an outcast in a space that will never go away or stay" (Qasmiyeh, 2020, p. 53). Here, he posits displacement as an embodied experience; lived, held, and carried in/with/amongst the bodies of refugees. Therein lies the importance of asking who speaks and who speaks for whom, not just in terms of the ways in which displacement is (re)presented but also whose interests such representations and epistemologies of displacement serve. Following feminist standpoint epistemology and decolonial theory, it matters where one is speaking from, and the location from which one knows the world. In telling their own stories, refugees bring to the fore the politics of voice—who gets to tell 'their' stories? Which voices are listened to and by whom?

What possibilities may be opened up when VR films engage with, rather than attempt to transcend, the embodied nature of experience and the attendant politics of location? As someone who benefits from the ability to move relatively freely around the world because of a system that privileges the mobility of some over others along a racialised and colonial logic, what might it look like to situate *my* body, *my* location, in a VR experience about displacement? Perhaps, such an experience will cease to be about displacement altogether, but more about the racialised and colonial global system of im/mobility. I suggest that the following two shifts in perspective is necessary for this to be achieved: turning towards structures that create the need for 'humanising' rather than attempting to define humanity, and moving away from an understanding of displacement underpinned by a humanitarian logic.

Beyond the economy of humanisation

Firstly, what is needed is not new ways of representing refugees who fit a particular genre of the human, but a shift towards changing the conditions that create a hierarchy of humanity and the need for 'humanising' in the first place. It is only through a refusal to capitulate to an economy of humanisation[116] reliant on stories and figures of

[116] I adopted this from Walia's (2021, p.107) term "economy of suffering".

refugees that elicit empathy, sympathy, compassion, inspiration, pity or any other feeling, that it becomes possible to practise a truly liberatory form of politics. By this I mean a form of politics that starts from the position that everyone should have access to means of existence and the freedom to move or stay. It is a form of politics based not on whether one can emphasise with another but on dismantling structures of power that demand humanisation in the first place, and constituting new worlds. It is also a form of politics that centres coloniality of power, knowledge, and being in reproducing and sustaining the hierarchy of humanity. Given the diversity of actors who speak in the name of humanity, it is paramount to question which human they are talking about, because this shapes the world that they are seeking to create (Wynter, 2003). There are particular dynamics that cast doubt on someone's claim to humanity, for example the processes of racialisation and gendering that I have mentioned in this thesis. Coming up with new ways to 'humanise' people only reinforces the hierarchy of humanity.

In resisting the economy of humanisation, there is much to be learnt from scholars and activists who have organised against the prison-industrial complex. For example, challenging the politics of innocence—a form of mobilisation that appeals to how innocent the victim was—in the mobilisation against police murders of Black people in the US, Wang (2018) writes: "When we build politics around standards of legitimate victimhood that require passive sacrifice, we will build a politics that requires a dead black boy to make its point" (p.294). Likewise, Nopper and Kaba (2021) write: "spectacle as the route to empathy means the atrocities itemized need to happen more often or get worse, to become more atrocious each round in hopes of being registered" (p.85). Humanisation follows a similar logic. A politics based around an economy of humanisation depends on genres of the human that can be recognised as 'worthy' of being 'saved'. It also relies on refugees' interminable subjection to deterrence, encampment, violence, and death. One way to break away from this logic, as Walia (2021) suggests, is to turn attention to global structures of power that cause displacement, such as imperial warfare, climate destruction, and neoliberal capitalism. This does not mean that we do not need stories by refugees. What it does mean is that 'being a refugee' cannot be fixed or essentialised (and packaged into a VR film), and that telling stories cannot be the only strategy in a politics that envisions a world where people can move to seek a (better) life.

Secondly, Section 7.3 mentioned that a humanising approach to displacement only ever operates within the terrain of empathy, help, and charity as a response to displacement because it presents displacement primarily as a humanitarian issue. I am not denying that displaced people need urgent access to aid and support. What I am asking is what other responses are foreclosed by the humanitarian framing. As Danewid (2017), Walia (2021), and Espiritu et al. (2022) have argued, as long as displacement is disconnected from global systems of power that cause it in the first place, refugees continue to be reduced to subjects of rescue and displacement remains disconnected from coloniality, imperial warfare, capitalist dispossession, environmental destruction, and the nation-state system.

I would like to add that this humanitarian framing of displacement is also related to the humanitarian logic underpinning the field of refugee and forced migration studies (Chimni, 2009; Wherry, 2015), where knowledge about displacement, refugees, and forced migrants[117] is produced. Chimni (2009) argues that the shift from refugee studies to the more expansive forced migration studies occurred in the post-Cold War context of Global North's increasing anxieties regarding the growing number of displaced people who could not be legally categorised as refugees (e.g. internally displaced persons and people displaced as a result of natural disasters or development projects). Accordingly, the main focus of the field shifted from "refugees" to how to "reform" countries in the Global South so that people would not migrate to the Global North (Chimni, 2009, p. 20). Wherry (2015) writes that only those who can be identified using a humanitarian logic are included as legitimate subjects of scholarly attention. More specifically, only those in "exceptional circumstances, facing existential threats to life" in the Global South are assumed to experience displacement (p.25). She uses the example of the displacement of low-income families in East London due to the 2012 Olympics to demonstrate how such cases of displacement are not considered within the remit of 'forced migration studies'. In short, displacement is assumed only to happen in the Global South, and attached to particular subjects that are legible within a humanitarian frame. This 'geography of displacement' (Wherry, 2015) thus plays a role in confining displacement in the humanitarian sphere and

[117] 'Forced migrant' emerged as a more expansive term than 'refugee'.

disconnecting it from political and economic processes. This geography of displacement is arguably not confined to the scholarly field of forced migration studies. It is also the basis for virtuous VR films about displacement.

Indeed, this point returns me to the discussion in the Introduction about my use of the term ‘refugee’. Scholars have noted how the division between refugees (who are forced to move, often for political reasons such as a fear of persecution, therefore deserving of humanitarian concern) and migrants (who move by choice, often for economic reasons, therefore not deserving of humanitarian concern) creates a politics of deservingness and is used by states to justify their deathly responses to those deemed ‘unwelcome’. Moving away from the humanitarian frame and understanding displacement as part of political and economic structures—to which refugees are often seen as external, as Rajaram (2018) points out—illuminates connections not just between seemingly disparate issues but also in terms of what needs to be done. Organising against climate destruction, the arms industry that benefit from conflicts, colonial legacies, or the hegemony of neoliberal capitalism—all of which contributed to the displacement from the conflict in Syria—are beyond the grasp of a technical fix under the control of corporations. And these various forms of *acting with others* may be where ways of being human, where no one attempts to fix or lays claim to a particular genre of the human, may be made and remade.

8. Abbreviations

AR: Augmented Reality

EU: European Union

IOM: International Organization for Migration

NGO: Non-governmental organisation

RIC: Reception and Identification Centres

SDGs: Sustainable Development Goals

UN: United Nations

UNHCR: United Nations High Commissioner for Refugees

UNICEF: United Nations Children’s Fund

UNVR United Nations Virtual Reality

VR: Virtual reality

WEF: World Economic Forum

XR: Mixed Reality

9. Bibliography

Abbas, M.-S. (2019) ‘Conflating the Muslim refugee and the terror suspect: responses to the Syrian refugee “crisis” in Brexit Britain’, *Ethnic and Racial Studies*, 42(14), pp. 2450–2469. Available at: https://doi.org/10.1080/01419870.2019.1588339.

Abdelaaty, L. and Hamlin, R. (2015) ‘“Migrants” or “refugees”? It’s the wrong question. Here’s how to help the people fleeing to Europe.’, *Washington Post*, 23 October. Available at: https://www.washingtonpost.com/news/monkey-cage/wp/2015/10/23/migrants-or-refugees-its-the-wrong-question-heres-how-to-help-the-people-fleeing-to-europe/ (Accessed: 9 February 2020).

Abu-Lughod, L. (2002) ‘Do Muslim Women Really Need Saving? Anthropological Reflections on Cultural Relativism and Its Others’, *American Anthropologist*, 104(3), pp. 783–790.

Ackerman, G. (2017) ‘Oculus and Vive headsets are taking Israel’s Army underground’, *The Indian Express*, 9 May. Available at: https://indianexpress.com/article/technology/tech-news-technology/oculus-and-vive-headsets-are-taking-israels-army-underground-4647815/ (Accessed: 11 May 2022).

Ackerman, G. and Bass, D. (2016) ‘Israeli Army Prepares Augmented Reality for Battlefield Duty’, *Bloomberg.com*, 15 August. Available at: https://www.bloomberg.com/news/articles/2016-08-15/microsoft-s-hololens-technology-adopted-by-israeli-military (Accessed: 14 April 2023).

Act for Peace (no date) *How it Works*. Available at: https://actforpeace.rationchallenge.org.au/how-it-works (Accessed: 28 January 2023).

Adler-Nissen, R., Andersen, K.E. and Hansen, L. (2020) ‘Images, emotions, and international politics: the death of Alan Kurdi’, *Review of International Studies*, 46(1), pp. 75–95. Available at: https://doi.org/10.1017/S0260210519000317.

Agier, M. (2010) ‘Humanity as an Identity and Its Political Effects (A Note on Camps and Humanitarian Government)’, *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, 1(1), pp. 29–45. Available at: https://doi.org/10.1353/hum.2010.0005.

Ahmed, K. and Tondo, L. (2021) ‘Fortress Europe: the millions spent on military-grade tech to deter refugees’, *The Guardian*, 6 December. Available at: https://www.theguardian.com/global-development/2021/dec/06/fortress-europe-the-millions-spent-on-military-grade-tech-to-deter-refugees (Accessed: 1 February 2023).

Ahmed, S. (2006) *Queer Phenomenology: Orientations, Objects, Others*. Durham and London: Duke University Press.

Ahmed, S. (2014) *The Cultural Politics of Emotion*. Second Edition. Edinburgh: Edinburgh University Press.

AJ Contrast (no date) *About, AJ Contrast*. Available at: https://ajcontrast.com/about (Accessed: 6 December 2022).

Akkerman, M. (2018) *Expanding the Fortress: The policies, the profiteers and the people shaped by EU's border externalisation programme*. Amsterdam: Transnational Institute.

Akkerman, M. (2021) *Financing Border Wars: The border industry, its financiers and human rights*. Transnational Institute and Stop Wapenhandel.

Al Jazeera (2015) 'Why Al Jazeera will not say Mediterranean "migrants"', *Al Jazeera*, 20 August. Available at: https://www.aljazeera.com/blogs/editors-blog/2015/08/al-jazeera-mediterranean-migrants-150820082226309.html (Accessed: 31 March 2020).

Al Jazeera Contrast (no date) *Films, AJ Contrast*. Available at: https://ajcontrast.com/films (Accessed: 14 February 2023).

Alberghini, D. (2020) 'Improving empathy: is virtual reality an effective approach to educating about refugees?', *Institute of Commonwealth Studies* [Preprint]. Available at: https://sas-space.sas.ac.uk/9315/ (Accessed: 26 March 2021).

Al-Ghazzi, O. (2014) '"Citizen Journalism" in the Syrian Uprising: Problematizing Western Narratives in a Local Context', *Communication Theory*, 24(4), pp. 435–454. Available at: https://doi.org/10.1111/comt.12047.

Al-Ghazzi, O. (2019) 'Extreme Speech| An Archetypal Digital Witness: The Child Figure and the Media Conflict Over Syria', *International Journal of Communication*, 13, pp. 3325–3243.

Allen, W. *et al.* (2018) 'Who Counts in Crises? The New Geopolitics of International Migration and Refugee Governance', *Geopolitics*, 23(1), pp. 217–243. Available at: https://doi.org/10.1080/14650045.2017.1327740.

Allsopp, J. (2017) 'Agent, victim, soldier, son: Intersecting masculinities in the European "refugee crisis"', in J. Freedman, Z. Kivilcim, and N.Ö. Baklacıoğlu (eds) *A Gendered Approach to the Syrian Refugee Crisis*. London, United Kingdom: Taylor & Francis Group. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=4813468.

Altenried, M. (2020) 'The platform as factory: Crowdwork and the hidden labour behind artificial intelligence', *Capital & Class*, 44(2), pp. 145–158. Available at: https://doi.org/10.1177/0309816819899410.

Amazon Web Services (2021) *Meta Selects AWS as Key, Long-Term Strategic Cloud Provider*. Available at: https://www.businesswire.com/news/home/20211201005108/en/Meta-Selects-AWS-as-Key-Long-Term-Strategic-Cloud-Provider (Accessed: 9 June 2022).

Amnesty International (2015) *First use of virtual reality fundraising a hit with members of the public*. Available at: https://www.amnesty.org.uk/press-releases/first-use-virtual-reality-fundraising-hit-members-public (Accessed: 22 March 2020).

Amnesty International (2017) *Contrast VR Releases 'I Am Rohingya' in Partnership with Amnesty International, Amnesty International*. Available at: https://www.amnesty.org/en/latest/news/2017/09/contrast-vr-releases-i-am-rohingya-in-partnership-with-amnesty-international/ (Accessed: 16 February 2023).

Amnesty International (2022) *Libya/EU: Conditions remain 'hellish' as EU marks 5 years of cooperation agreements*, *Amnesty International*. Available at: https://www.amnesty.org/en/latest/news/2022/01/libya-eu-conditions-remain-hellish-as-eu-marks-5-years-of-cooperation-agreements/ (Accessed: 10 February 2023).

Anderson, B. and Sharma, N. (2012) '"We are all foreigners": No Borders as a practical political project', in *Citizenship, Migrant Activism and the Politics of Movement*. First Edition, pp. 73–91.

Anderson, M. (2015) 'Can tearjerker virtual reality movies tempt donors to give more aid?', *The Guardian*, 31 December. Available at: https://www.theguardian.com/global-development/2015/dec/31/virtual-reality-movies-aid-humanitarian-assistance-united-nations (Accessed: 22 March 2020).

Andersson, R. (2014) *Illegality, Inc. : Clandestine Migration and the Business of Bordering Europe*. Oakland, California: University of California Press (California Series in Public Anthropology).

Anduril Industries (2021) *Anduril Raises $450 Million in Series D Funding*, *Medium*. Available at: https://blog.anduril.com/anduril-raises-450-million-in-series-d-funding-671f0a27876b (Accessed: 10 May 2022).

Are You Syrious? (2020) *AYS Daily Digest 30/01/20: "Moria is hell" Women take to the streets in Lesvos*, *Medium*. Available at: https://medium.com/are-you-syrious/ays-daily-digest-30-01-20-moria-is-hell-women-take-to-the-streets-in-lesvos-b70e7d5bbeac (Accessed: 28 March 2020).

Arendt, H. (1973) 'The Decline of the Nation-State and the End of the Rights of Man', in *The Origins of Totalitarianism*. New York: Houghton Mifflin Harcourt Publishing Company, pp. 267–302.

Army Technology (2014) 'German Armed Forces sign agreement to use Virtual Battlespace 3 software', *Army Technology*, 4 December. Available at: https://www.army-technology.com/news/newsvirtual-battlespace-3-software-4459971/ (Accessed: 11 May 2022).

Arora, G. (2015) 'The UN's First Virtual Reality Documentary Puts You Inside a Syrian Refugee Camp'. Available at: https://www.vice.com/en_us/article/jpv5ng/virtual-reality-doc-puts-you-inside-a-syrian-refugee-camp (Accessed: 20 November 2019).

Arora, G. (2017) 'Gabo Arora: VR as a tool to create active empathy'. Available at: https://www.designatlarge.it/gabo-arora-vr-active-empathy/?lang=en (Accessed: 11 February 2021).

Arora, G. (2019) '"Virtual reality inspires empathy", says Gabo Arora'. Available at: https://ideas4development.org/en/virtual-reality-empathy/ (Accessed: 10 February 2021).

Arora, G. and Jones, T. (2017) 'Tim Jones & Gabo Arora'. La Triennale, Milano, 28 February. Available at: https://www.meetcenter.it/en/lecture/tim-jones-gabo-arora/ (Accessed: 14 February 2021).

Asad, T. (2015) 'Reflections on Violence, Law, and Humanitarianism', *Critical Inquiry*,

41(2), pp. 390–427.

Athique, A. (2013) ‘Building a digital society’, in *Digital Media and Society: An Introduction*. Cambridge: Policy Press.

Awwwards (2017) *Case Study: Searching for Syria by Google Brand Studio, Awwwards*. Available at: https://www.awwwards.com/case-study-searching-for-syria-by-google-brand-studio.html (Accessed: 30 March 2023).

Azevedo, R.T. *et al.* (2021) ‘When the lens is too wide: The political consequences of the visual dehumanization of refugees’, *Humanities and Social Sciences Communications*, 8(1), pp. 1–16. Available at: https://doi.org/10.1057/s41599-021-00786-x.

Azzarello, N. (2016) *ai weiwei wraps berlin’s konzerthaus with 14,000 refugee life jackets*, *designboom*. Available at: https://www.designboom.com/art/ai-weiwei-life-jackets-refugee-konzerthaus-berlin-02-15-2016/ (Accessed: 22 June 2022).

Azzouz, A. (2021) ‘Can the Syrians speak?’, *London International Development Centre Migration Leadership Team*, 14 July. Available at: https://blogs.soas.ac.uk/lidc-mlt/2021/07/14/can-the-syrians-speak/ (Accessed: 31 October 2021).

Ba, O. (2022) ‘“The Europeans and Americans Don’t Know Africa”: Of Translation, Interpretation, and Extraction’, *Millennium*, p. 03058298211063927. Available at: https://doi.org/10.1177/03058298211063927.

BAE Systems (2022) *BAE Systems completes acquisition of Bohemia Interactive Simulations*, *BAE Systems*. Available at: https://www.baesystems.com/en/article/bae-systems-completes-acquisition-of-bohemia-interactive-simulations (Accessed: 6 December 2022).

Bailenson, J. (2018) *Experience on Demand: What virtual reality is, how it works, and what it can do*. First edition. New York: W.W. Norton & Company.

Balsamo, A. (1997) *Technologies of the Gendered Body*. Duke University Press.

Barbrook, R. and Cameron, A. (1995) *The Californian Ideology*, *Mute*. Available at: https://www.metamute.org/editorial/articles/californian-ideology (Accessed: 19 March 2020).

Barnard, A. (2015) ‘Family’s Tragedy Goes Beyond One Boy: Iconic Image Is Grim Symbol of the Desperation Gripping Syria’, *The New York Times*, 28 December.

Barnett, M. (2011) *Empire of Humanity: A History of Humanitarianism*. Ithaca, UNITED STATES: Cornell University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=3138200 (Accessed: 11 February 2020).

Barnett, M. (2020) ‘Introduction: Worlds of Difference’, in M. Barnett (ed.) *Humanitarianism and Human Rights: A World of Differences?* Cambridge: Cambridge University Press (Human Rights in History). Available at: 10.1017/9781108872485.001.

Barnett, M. (2023) ‘Neoliberalism, Philanthropy, and Humanitarianism: Pragmatic or Faustian Bargains?’, in K. Mitchell and P. Pallister-Wilkins (eds) *The Routledge International Handbook of Critical Philanthropy and Humanitarianism*. Oxford and New

York: Routledge, pp. 9–25.

Barthes, R. (1977) *Image-Music-Text.* Translated by S. Heath. London, United Kingdom: Fontana Press.

Bauer, U. (2015) *90,000 residents and 200,000 refugees, Deutsche Welle*. Available at: https://www.dw.com/en/90000-residents-and-200000-refugees/a-18822916 (Accessed: 29 July 2022).

BBC News (2013) 'Syrian boys who sparked a revolution', *BBC News*, 13 April. Available at: https://www.bbc.co.uk/news/av/world-middle-east-22140807 (Accessed: 9 February 2023).

BBC News (2016a) 'Charlie Hebdo backlash over "racist" Alan Kurdi cartoon', *BBC News*, 13 January. Available at: https://www.bbc.com/news/world-europe-35306906 (Accessed: 30 March 2023).

BBC News (2016b) 'Dentists condemn call for child migrants' teeth to be tested', *BBC News*, 19 October. Available at: https://www.bbc.com/news/uk-37700074 (Accessed: 9 December 2022).

BBC News (2019) 'Google and BBC scrap VR projects', *BBC News*, 17 October. Available at: https://www.bbc.com/news/technology-50080594 (Accessed: 25 March 2023).

BBC News (2021) 'Microsoft to sell augmented reality goggles to army', *BBC News*, 1 April. Available at: https://www.bbc.com/news/business-56598882 (Accessed: 10 May 2022).

Beaumont, H. (2022) '"Never sleeps, never even blinks": the hi-tech Anduril towers spreading along the US border', *The Guardian*, 16 September. Available at: https://www.theguardian.com/us-news/2022/sep/16/anduril-towers-surveillance-us-mexico-border-migrants (Accessed: 1 February 2023).

Benjamin, R. (2019) *Race after Technology: Abolitionist Tools for the New Jim Code*. Newark, UK: Polity Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5820427 (Accessed: 17 February 2021).

Berlant, L. (2004) 'Introduction: Compassion (and Withholding)', in L. Berlant (ed.) *Compassion: The Culture and Politics of an Emotion*. New York; London: Routledge, pp. 1–14.

Bhambra, G.K. (2014) 'Postcolonial and decolonial dialogues', *Postcolonial Studies*, 17(2), pp. 115–121. Available at: https://doi.org/10.1080/13688790.2014.966414.

Bhambra, G.K. (2017a) 'Brexit, Trump, and "methodological whiteness": on the misrecognition of race and class', *The British Journal of Sociology*, 68(S1), pp. S214–S232. Available at: https://doi.org/10.1111/1468-4446.12317.

Bhambra, G.K. (2017b) 'The current crisis of Europe: Refugees, colonialism, and the limits of cosmopolitanism', *European Law Journal*, 23(5), pp. 395–405. Available at: https://doi.org/10.1111/eulj.12234.

Bierend, D. (2015) *The UN Is Using Virtual Reality to Make the Rich and Powerful Feel Empathy, VICE*. Available at: https://www.vice.com/en/article/gvya7x/the-un-is-using-virtual-reality-to-make-the-rich-and-powerful-feel-empathy (Accessed: 17 February 2021).

Bird, G. and Schmid, D. (2021) 'Humanitarianism and the "Migration Fix": On the Implication of NGOs in Racial Capitalism and the Management of Relative Surplus Populations', *Geopolitics*, 0(0), pp. 1–27. Available at: https://doi.org/10.1080/14650045.2021.2008361.

Black, J. (2018) 'Migrant deaths and disappearances', in *Data Bulletin Series: Informing the Implementation of the Global Compact for Migration*. Geneva, Switzerland: International Organization for Migration, pp. 58–62. Available at: https://publications.iom.int/books/data-bulletin-series-informing-implementation-global-compact-migration (Accessed: 28 March 2023).

Bleiker, R. *et al.* (2013) 'The visual dehumanisation of refugees', *Australian Journal of Political Science*, 48(4), pp. 398–416. Available at: https://doi.org/10.1080/10361146.2013.840769.

Bobrowsky, J., Rodriguez, S. and Bobrowsky, M. (2022) *Company Documents Show Meta's Flagship Metaverse Falling Short, The Wall Street Journal*. Available at: https://www.wsj.com/articles/meta-metaverse-horizon-worlds-zuckerberg-facebook-internal-documents-11665778961 (Accessed: 19 February 2023).

Bogaert, K. (2013) 'Contextualizing the Arab Revolts: The Politics behind Three Decades of Neoliberalism in the Arab World', *Middle East Critique*, 22(3), pp. 213–234. Available at: https://doi.org/10.1080/19436149.2013.814945.

Boler, M. (1997) 'The risks of empathy: Interrogating multiculturalism's gaze', *Cultural Studies*, 11(2), pp. 253–273. Available at: https://doi.org/10.1080/09502389700490141.

Bollmer, G. (2017) 'Empathy machines', *Media International Australia*, 165(1), pp. 63–76. Available at: https://doi.org/10.1177/1329878X17726794.

Bolter, J.D. and Grusin, R. (1999) *Remediation: Understanding New Media*. Cambridge, Massachusetts: MIT Press.

Boochani, B. (2019) *No Friend But The Mountains*. Translated by O. Tofighian. London, United Kingdom: Picador.

Brankamp, H. and Weima, Y. (2021) 'Introduction: Humanizing Studies of Refuge and Displacement?', *Refuge: Canada's Journal on Refugees*, 37(2), pp. 1–10. Available at: https://doi.org/10.25071/1920-7336.40958.

Brenner, Y. and Ohlendorf, K. (2016) *Time for the facts. What do we know about Cologne four months later?, The Correspondent*. Available at: https://thecorrespondent.com/4401/time-for-the-facts-what-do-we-know-about-cologne-four-months-later/1073698080444-e20ada1b (Accessed: 31 July 2022).

Bujić, M. and Hamari, J. (2020) 'Immersive journalism: Extant corpus and future agenda', in. *GamiFIN Conference 2020*, Finland, pp. 136–145. Available at: https://ceur-ws.org/Vol-2637/paper14.pdf.

Bulman, M. (2020) *Scheme bringing lone child refugees to safety in UK ends*, *The Independent*. Available at: https://www.independent.co.uk/news/uk/home-news/child-refugees-dub-scheme-amendment-unaccompanied-home-office-a9526231.html (Accessed: 9 December 2022).

Burman, E. (1994) 'Innocents abroad: Western fantasies of childhood and the iconography of emergencies.', *Disasters*, 18(3), pp. 238–253. Available at: https://doi.org/10.1111/j.1467-7717.1994.tb00310.x.

Burns, R. (2019a) '"Let the Private Sector Take Care of This": The Philanthro-Capitalism of Digital Humanitarianism', in M. Graham (ed.) *Digital Economies at Global Margins*. The MIT Press, pp. 129–151. Available at: https://doi.org/10.7551/mitpress/10890.003.0015.

Burns, R. (2019b) 'New Frontiers of Philanthro-capitalism: Digital Technologies and Humanitarianism', *Antipode*, 51(4), pp. 1101–1122. Available at: https://doi.org/10.1111/anti.12534.

Bursztynsky, J. (2019) *Oculus founder says he 'got fired' from Facebook, suggesting a pro-Trump donation was to blame*, *CNBC*. Available at: https://www.cnbc.com/2019/05/22/oculus-co-founder-i-got-fired-from-facebook-for-no-reason-at-all.html (Accessed: 10 May 2022).

Butcher, M. (2015) 'UN Launches Powerful, First Ever, VR Film following Syrian Refugee Girl', *TechCrunch*, 23 January. Available at: https://social.techcrunch.com/2015/01/23/un-launches-powerful-oculus-virtual-reality-film-following-syrian-refugee-girl/ (Accessed: 10 August 2022).

Butler, J. (2009) *Frames of War: When Is Life Grievable?* London, New York: Verso Books.

Bye, K. (2015) '#245: 50 years of VR with Tom Furness: The Super Cockpit, Virtual Retinal Display, HIT Lab, & Virtual World Society | Voices of VR Podcast', *Voices of VR Podcast*, 17 November. Available at: https://voicesofvr.com/245-50-years-of-vr-with-tom-furness-the-super-cockpit-virtual-retinal-display-hit-lab-virtual-world-society/ (Accessed: 7 June 2022).

Campt, T.M. (2017) *Listening to Images*. North Carolina, UNITED STATES: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=4816510.

Cañas, T. (2016) 'On experiential-based refugee campaigns & the performance of humanitarianism', 16 June. Available at: http://riserefugee.org/on-experiential-based-refugee-campaigns-the-performance-of-humanitarianism/ (Accessed: 20 February 2020).

Cann, O. (2017) *Who pays for Davos?, World Economic Forum*. Available at: https://www.weforum.org/agenda/2017/01/who-pays-for-davos/ (Accessed: 19 March 2023).

Carby, H.V. (2019) *Imperial Intimacies: A Tale of Two Islands*. London: Verso Books.

Carpi, E. and Diana, C. (2019) 'The Right to Play Versus the Right to War? Vulnerable Childhood in Lebanon's NGOization', in K. Cheney and A. Sinervo (eds) *Disadvantaged Childhoods and Humanitarian Intervention : Processes of Affective Commodification and Objectification*. Cham, Switzerland: Springer International Publishing AG, pp. 135–156. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5683651.

Carroll, W.K. and Carson, C. (2006) ‘Neoliberalism, capitalist class formation and the global network of corporations and policy groups’, in D. Plehwe, B. Walpen, and G. Neunhöffer (eds) *Neoliberal Hegemony: A Global Critique*. Oxford and New York: Routledge (Routledge/RIPE Studies in Global Political Economy), pp. 51–69.

Caserman, P. *et al.* (2021) ‘Cybersickness in current-generation virtual reality head-mounted displays: systematic review and outlook’, *Virtual Reality*, 25(4), pp. 1153–1170. Available at: https://doi.org/10.1007/s10055-021-00513-6.

Castles, S. (2003) ‘Towards a Sociology of Forced Migration and Social Transformation’, *Sociology*, 37(1), pp. 13–34. Available at: https://doi.org/10.1177/0038038503037001384.

Castles, S. (2006) ‘Global Perspectives on Forced Migration’, *Asian and Pacific Migration Journal*, 15(1), pp. 7–28. Available at: https://doi.org/10.1177/011719680601500102.

CBS News Bay Area (2023) *Meta buying maker of VR fitness app Supernatural after favorable court ruling, CBS News Bay Area*. Available at: https://www.cbsnews.com/sanfrancisco/news/meta-vr-fitness-app-supernatural-within-unlimited/ (Accessed: 17 March 2023).

Césaire, A. (2000) *Discourse on Colonialism*. Translated by J. Pinkham. New York: Monthly Review Press.

Chang, E., Kim, H.T. and Yoo, B. (2020) ‘Virtual Reality Sickness: A Review of Causes and Measurements’, *International Journal of Human–Computer Interaction*, 36(17), pp. 1658–1682. Available at: https://doi.org/10.1080/10447318.2020.1778351.

Chesher, C. (1994) ‘Colonizing Virtual Reality Construction of the Discourse of Virtual Reality, 1984-1992’, *Cultronix* [Preprint].

Chimni, B.S. (1998) ‘The Geopolitics of Refugee Studies: A View from the South’, *Journal of Refugee Studies*, 11(4), pp. 350–374. Available at: https://doi.org/10.1093/jrs/11.4.350-a.

Chimni, B.S. (2009) ‘The Birth of a “Discipline”: From Refugee to Forced Migration Studies’, *Journal of Refugee Studies*, 22(1), pp. 11–29. Available at: https://doi.org/10.1093/jrs/fen051.

Chishti, M. and Hipsman, F. (2015) ‘THE CHILD AND FAMILY MIGRATION SURGE OF SUMMER 2014: A SHORT-LIVED CRISIS WITH A LASTING IMPACT’, *Journal of International Affairs*, 68(2), pp. 95–XIV.

Chouliaraki, L. (2013) *The Ironic Spectator: Solidarity in the Age of Post-Humanitarianism*. Cambridge; Massachusetts: Polity Press.

Chouliaraki, L. (2021) ‘Post-humanitarianism: Solidarity as lifestyle politics’, in *Routledge Handbook of Humanitarian Communication*. Routledge, pp. 421–435. Available at: https://doi.org/10.4324/9781315363493-26.

Chouliaraki, L. and Stolic, T. (2017) ‘Rethinking media responsibility in the refugee “crisis”: a visual typology of European news’, *Media, Culture & Society*, 39(8), pp. 1162–1177. Available at: https://doi.org/10.1177/0163443717726163.

Chow, A.R. (2023) *How the World Economic Forum Plans to Bring Leaders Together in the Metaverse, Time*. Available at: https://time.com/6245731/global-collaboration-village-metaverse-davos-2023/ (Accessed: 19 January 2023).

Chrisafis, A. (2018) 'Paris "Spider-Man" joins fire brigade after citizenship fast-tracked', *The Guardian*, 29 May. Available at: https://www.theguardian.com/world/2018/may/29/paris-spider-man-joins-fire-brigade-after-work-papers-fast-tracked (Accessed: 16 January 2023).

Christofi, M., Hadjipanayi, C. and Michael-Grigoriou, D. (2022) 'The Use of Storytelling in Virtual Reality for Studying Empathy: A Review', *Institute of Electrical and Electronics Engineers* [Preprint].

Chun, W.H.K. (2016) 'WEIRD REALITY: Head-Mounted Art && Code Keynote', 6 October. Available at: https://vimeo.com/214713185 (Accessed: 26 May 2022).

Clark, M. (2023) *Congress says the Army can't spend $400 million buying Microsoft HoloLens headsets, The Verge*. Available at: https://www.theverge.com/2023/1/12/23552132/microsoft-hololens-army-contract-denied-v1-2-improvements (Accessed: 14 April 2023).

Clayton, J. and Holland, H. (2015) *Over one million sea arrivals reach Europe in 2015, UNHCR*. Available at: https://www.unhcr.org/news/latest/2015/12/5683d0b56/million-sea-arrivals-reach-europe-2015.html (Accessed: 11 July 2022).

Clouds Over Sidra (2016). Within. Available at: https://www.youtube.com/watch?v=mUosdCQsMkM (Accessed: 15 February 2021).

Cole, G. (2018) 'Questioning the value of "refugee" status and its primary vanguard: the case of Eritreans in Uganda', *Working Paper Series No.124, Refugee Studies Centre, University of Oxford* [Preprint].

Collins, P.H. (1991) *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. New York; London: Routledge.

Collins, P.H. (1999) 'Reflections on the Outsider Within', *Journal of Career Development*, 26(1), pp. 85–88. Available at: https://doi.org/10.1177/089484539902600107.

Combahee River Collective (1977) 'The Combahee River Collective Statement'.

Conceição, V. (2021) 'ARESIBO project overview'. *FRONTEX Workshop on Horizon 2020 projects*, 21 May. Available at: https://frontex.europa.eu/assets/EUresearchprojects/News/ARESIBO.pdf.

Concern Worldwide (no date) *How it Works, Ration Challenge*. Available at: https://www.rationchallenge.org.uk/how-it-works (Accessed: 24 February 2022).

Conneally, P. (2012) 'Digital humanitarianism'. TEDxRC2, 17 February. Available at: https://www.youtube.com/watch?v=L9_c1j9VRwE (Accessed: 20 February 2023).

Conroy, A. (2017) *The BBC and Virtual Reality, BBC R&D*. Available at: https://www.bbc.co.uk/rd/blog/2016-06-the-bbc-and-virtual-reality (Accessed: 21 April 2022).

Cooley, A. and Ron, J. (2002) ‘The NGO Scramble: Organizational Insecurity and the Political Economy of Transnational Action’, *International Security*, 27(1), pp. 5–39.

Corrao, I. (2022) *EU-Turkey Statement & Action Plan, European Parliament*. Available at: https://www.europarl.europa.eu/legislative-train/theme-towards-a-new-policy-on-migration/file-eu-turkey-statement-action-plan (Accessed: 11 July 2022).

Cottle, S. (2004) *Mediatized Conflict*. Berkshire: McGraw-Hill Education. Available at: https://ebookcentral.proquest.com/lib/uea/detail.action?docID=287846 (Accessed: 7 April 2020).

Couldry, N. (2008) ‘Mediatization or mediation? Alternative understandings of the emergent space of digital storytelling’, *New Media & Society*, 10(3), pp. 373–391. Available at: https://doi.org/10.1177/1461444808089414.

Couldry, N. and Mejias, U.A. (2019) *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. Redwood City, United States: Stanford University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5789180 (Accessed: 26 May 2020).

Cravinho, D. (2016) ‘How UNICEF is Using VR at Events to Transport People into Humanitarian Crises’. Available at: https://www.eventbrite.co.uk/blog/vr-events-ds00/ (Accessed: 26 April 2021).

Crawford, K. and Joler, V. (2018) *Anatomy of an AI System*. Available at: http://www.anatomyof.ai (Accessed: 2 May 2023).

Crawley, H. and Skleparis, D. (2018) ‘Refugees, migrants, neither, both: categorical fetishism and the politics of bounding in Europe’s “migration crisis”’, *Journal of Ethnic and Migration Studies*, 44(1), pp. 48–64. Available at: https://doi.org/10.1080/1369183X.2017.1348224.

Creech, B. and Nadler, A.M. (2018) ‘Post-industrial fog: Reconsidering innovation in visions of journalism’s future’, *Journalism*, 19(2), pp. 182–199. Available at: https://doi.org/10.1177/1464884916689573.

Crossroads Foundation (no date) ‘Refugee Run | A Day in the Life of a Refugee’. Available at: https://www.refugee-run.org/ (Accessed: 23 February 2022).

Çubukçu, A. (2017) ‘Thinking against humanity’, *London Review of International Law*, 5(2), pp. 251–267. Available at: https://doi.org/10.1093/lril/lrx006.

Daher, J. (2018) ‘Syria: The Social Origins of the Uprising’, *Rosa Luxemburg Stiftung*, July. Available at: https://www.rosalux.de/en/publication/id/39149/syria-the-social-origins-of-the-uprising (Accessed: 21 October 2022).

Dahi, O.S. and Munif, Y. (2012) ‘Revolts in Syria: Tracking the Convergence Between Authoritarianism and Neoliberalism’, *Journal of Asian and African Studies*, 47(4), pp. 323–332. Available at: https://doi.org/10.1177/0021909611431682.

Dahinden, J. (2016) ‘A plea for the ‘de-migranticization’ of research on migration and integration’, *Ethnic and Racial Studies*, 39(13), pp. 2207–2225. Available at:

https://doi.org/10.1080/01419870.2015.1124129.

Danewid, I. (2017) ‘White innocence in the Black Mediterranean: hospitality and the erasure of history’, *Third World Quarterly*, 38(7), pp. 1674–1689. Available at: https://doi.org/10.1080/01436597.2017.1331123.

Danewid, I. (2022) ‘Policing the (migrant) crisis: Stuart Hall and the defence of whiteness’, *Security Dialogue*, 53(1), pp. 21–37. Available at: https://doi.org/10.1177/0967010621994074.

Darling, J. (2021) ‘The Cautious Politics of “Humanizing” Refugee Research | Refuge: Canada’s Journal on Refugees’, *Refuge: Canada’s Journal on Refugees*, 37(2), pp. 56–62.

Davis, M.H. (1980) ‘A multidimensional approach to individual differences in empathy’, *JSAS Catalog of Selected Documents in Psychology*, 10.

De Genova, N. (2005) *Working the Boundaries : Race, Space, and Illegality in Mexican Chicago*. North Carolina, UNITED STATES: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1168473.

De Genova, N. (2016) ‘The European Question: Migration, Race, and Postcoloniality in Europe’, *Social Text*, 34(3 (128)), pp. 75–102. Available at: https://doi.org/10.1215/01642472-3607588.

De Genova, N., Garelli, G. and Tazzioli, M. (2018) ‘Autonomy of Asylum?: The Autonomy of Migration Undoing the Refugee Crisis Script’, *South Atlantic Quarterly*, 117(2), pp. 239–265. Available at: https://doi.org/10.1215/00382876-4374823.

De Genova, N.P. (2002) ‘Migrant “Illegality” and Deportability in Everyday Life’, *Annual Review of Anthropology*, 31(1), pp. 419–447. Available at: https://doi.org/10.1146/annurev.anthro.31.040402.085432.

Dean, G. (2022) *Meta has pumped $36 billion into its metaverse and VR businesses since 2019. These 4 charts show the scale of its extreme spending — and huge losses.*, *Business Insider*. Available at: https://www.businessinsider.com/charts-meta-metaverse-spending-losses-reality-labs-vr-mark-zuckerberg-2022-10 (Accessed: 4 November 2022).

Defence and Security Accelerator (2021) *DASA Annual Review 2020/2021*, *DASA Annual Review 2020/2021*. Available at: https://express.adobe.com/page/myVPZ8baX7UwF/ (Accessed: 11 May 2022).

Defence and Security Accelerator (no date) *About us*, *GOV.UK*. Available at: https://www.gov.uk/government/organisations/defence-and-security-accelerator/about (Accessed: 6 December 2022).

Deighton, K. (2017) *How the UN is tackling ‘compassion fatigue and fear’ in its data laden tie-up with Google*, *Searching for Syria*, *The Drum*. Available at: https://www.thedrum.com/news/2017/05/31/how-the-un-tackling-compassion-fatigue-and-fear-its-data-laden-tie-up-with-google (Accessed: 30 March 2023).

Digital Cultures Research Centre, University of the West of England (2015) *Representing the unfilmable: Nonny de la Peña on VR & ‘immersive journalism’*, *i-Docs*. Available at: http://i-

docs.org/representing-the-unfilmable-nonny-de-la-pena-on-vr-immersive-journalism/ (Accessed: 19 April 2022).

Dillon, M. (1998) 'Epilogue The Scandal of the Refugee: Some Reflections on the "Inter" of International Relations', *Refuge: Canada's Journal on Refugees*, 17(6), pp. 30–40. Available at: https://doi.org/10.25071/1920-7336.21998.

Doctors Without Borders (2018) *Children trapped in Greek island camps attempting suicide and self-harm, Doctors Without Borders*. Available at: https://www.doctorswithoutborders.org/latest/children-trapped-greek-island-camps-attempting-suicide-and-self-harm (Accessed: 11 July 2022).

Douo, M., Izuzquiza, L. and Silva, M. (2021) *Lobbying Fortress Europe: The making of a border-industrial complex, Corporate Europe Observatory*. Available at: https://corporateeurope.org/en/lobbying-fortress-europe (Accessed: 17 February 2023).

Edelman, L. (2004) *No Future : Queer Theory and the Death Drive*. North Carolina, United States: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1168042.

Egliston, B. and Carter, M. (2021) 'Critical questions for Facebook's virtual reality: data, power and the metaverse', *Internet Policy Review*, 10(4). Available at: https://policyreview.info/articles/analysis/critical-questions-facebooks-virtual-reality-data-power-and-metaverse (Accessed: 28 April 2022).

Egliston, B. and Carter, M. (2022) 'Oculus imaginaries: The promises and perils of Facebook's virtual reality', *New Media & Society*, 24(1), pp. 70–89. Available at: https://doi.org/10.1177/1461444820960411.

El-Enany, N. (2016) 'Aylan Kurdi: The Human Refugee', *Law and Critique*, 27(1), pp. 13–15. Available at: https://doi.org/10.1007/s10978-015-9175-7.

El-Enany, N. (2020) *(B)ordering Britain: Law, race and empire*. Manchester: Manchester University Press.

Elias, C. and Omareen, Z. (2014) 'Syria's Imperfect Cinema', in M. Hasala, Z. Omareen, and N. Mahfoud (eds) *Syria Speaks: Art and Culture from the Frontline*. London, United Kingdom: Saqi Books, pp. 257–268.

Elias, J. (2013) 'Davos Woman to the Rescue of Global Capitalism: Postfeminist Politics and Competitiveness Promotion at the World Economic Forum', *International Political Sociology*, 7(2), pp. 152–169. Available at: https://doi.org/10.1111/ips.12015.

Ellingson, L.L. (2017) *Embodiment in Qualitative Research*. Milton, UNITED KINGDOM: Taylor & Francis Group. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=4838173.

El-Rashidi, S. (2019) 'Stranded on the island of Lesbos, refugees remain in limbo', *Atlantic Council*, 25 November. Available at: https://www.atlanticcouncil.org/blogs/menasource/stranded-on-the-island-of-lesbos-refugees-remain-in-limbo/ (Accessed: 2 July 2022).

Emejulu, A. (2022) *Fugitive Feminism*. London: Silver Press.

Enloe, C. (1991) '"Womenandchildren" Propaganda Tools of Patriarchy', in G. Bates (ed.) *Mobilizing Democracy: Changing the U.S. Role in the Middle East*. Maine, US: Common Courage Press.

Ensmenger, N. (2018) 'The Environmental History of Computing', *Technology and Culture*, 59(4), pp. S7–S33. Available at: https://doi.org/10.1353/tech.2018.0148.

Erdal, M.B. and Oeppen, C. (2018) 'Forced to leave? The discursive and analytical significance of describing migration as forced and voluntary', *Journal of Ethnic and Migration Studies*, 44(6), pp. 981–998. Available at: https://doi.org/10.1080/1369183X.2017.1384149.

Esmeir, S. (2006) 'On Making Dehumanization Possible', *PMLA*, 121(5), pp. 1544–1551.

Espiritu, Y.L. *et al.* (2022) *Departures : An Introduction to Critical Refugee Studies*. Amsterdam, the Netherlands: University of California Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=7070145.

Esses, V.M., Medianu, S. and Lawson, A.S. (2017) 'Uncertainty, Threat, and the Role of the Media in Promoting the Dehumanization of Immigrants and Refugees', *Analyses of Social Issues and Public Policy*, pp. 518–536. Available at: https://doi.org/10.1111/josi.12027@10.1111/(ISSN)1530-2415.IAMNOTYOURIMMIGRANTWHATTHEINVENTIONOFTHEIMMIGRANTREVEALSABOUTUS.

European Union (2020) *Factsheet for the EU Emergency Trust Fund for Africa*. Brussels: European Commission.

Evans, L. (2018) *The Re-Emergence of Virtual Reality*. New York; Oxford: Routledge. Available at: https://ebookcentral.proquest.com/lib/uea/detail.action?docID=5583421 (Accessed: 23 March 2020).

Fahey, J. (2015) 'The Guardian's decision to publish shocking photos of Aylan Kurdi', *The Guardian*, 7 September. Available at: https://www.theguardian.com/commentisfree/2015/sep/07/guardian-decision-to-publish-shocking-photos-of-aylan-kurdi (Accessed: 27 August 2022).

Fanon, F. (2008) *Black Skin, White Masks*. Translated by R. Philcox. New York: Grove Press.

Farid, S. (2017) 'The boy who ignited the Syrian revolution', *Al Arabiya English*, 16 March. Available at: https://english.alarabiya.net/features/2017/03/16/The-boy-who-ignited-the-Syrian-revolution (Accessed: 9 February 2023).

Fassin, D. (2010) 'Inequalities of Lives, Hierarchies of Humanity: Moral Commitments and Ethical Dilemmas of Humanitarianism', in I. Feldman and M. Ticktin (eds) *In the Name of Humanity: The Government of Threat and Care*, pp. 238–255.

Fassin, D. (2016) *Hot Spots: What They Mean, Observatory of the Refugee and Migration Crisis in the Aegean*. Available at: https://refugeeobservatory.aegean.gr/en/hot-spots-what-

they-mean-d-fassin?language_content_entity=en.

Fast, L. (2016) ‘Unpacking the principle of humanity: Tensions and implications’, *International Review of the Red Cross*, 97(897/898), pp. 111–131.

Federici, S. (2020) *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. Second Edition. PM Press.

Fekete, L. (2017) ‘Introduction’, in *Humanitarianism: the unacceptable face of solidarity*. London, United Kingdom: The Institute of Race Relations, pp. 1–6.

Feldman, I. and Ticktin, M. (2010) ‘Introduction: Government and Humanity’, in *In the Name of Humanity: The Government of Threat and Care*. Duke University Press, p. pp.1-26.

Fiddian-Qasmiyeh, E. (2017) ‘Representations of Displacement Series: Disrupting Humanitarian Narratives?’, *Refugee Hosts*, 1 September. Available at: https://refugeehosts.org/representations-of-displacement-series/ (Accessed: 25 March 2020).

Fildis, A.T. (2011) ‘The Troubles in Syria: Spawned by French Divide and Rule’, *Middle East Policy*, 18(4), pp. 129–139. Available at: https://doi.org/10.1111/j.1475-4967.2011.00515.x.

Flatlandsmo, S. and Gynnild, A. (2021) ‘Project Syria: Accuracy in immersive journalism’, in *Immersive Journalism as Storytelling*. Routledge.

Fortune Business Insight (2021) *Virtual Reality (VR) Market Share, Growth | Research Report, 2028, Fortune Business Insight*. Available at: https://www.fortunebusinessinsights.com/industry-reports/virtual-reality-market-101378 (Accessed: 18 April 2022).

Fotopoulos, S. and Kaimaklioti, M. (2016) ‘Media Discourse on the Refugee Crisis: On what have the Greek, German and British Press Focused?’, *European View*, 15(2), pp. 265–279. Available at: https://doi.org/10.1007/s12290-016-0407-5.

Foxman, M., Markowitz, D.M. and Davis, D.Z. (2021) ‘Defining empathy: Interconnected discourses of virtual reality’s prosocial impact’, *New Media & Society*, 23(8), pp. 2167–2188. Available at: https://doi.org/10.1177/1461444821993120.

Fransen, S. and de Haas, H. (2019) ‘The Volume and Geography of Forced Migration’, *IMI Working Paper Series*, 156, pp. 1–35.

Freudenthal, E. *et al.* (2022) *Frontex, the EU Pushback Agency*. Lighthouse Reports. Available at: https://www.lighthousereports.nl/investigation/frontex-the-eu-pushback-agency/ (Accessed: 10 February 2023).

Frontex (no date) *FAQ, Frontex*. Available at: https://frontex.europa.eu/about-frontex/faq/key-facts/ (Accessed: 10 February 2023).

Fuller, J. (2020) *Supporting refugees and displaced people on World Refugee Day, Google*. Available at: https://blog.google/outreach-initiatives/google-org/supporting-refugees-and-displaced-people-world-refugee-day/ (Accessed: 30 March 2023).

Gatter, M.N. (2017) ‘Restoring childhood: humanitarianism and growing up Syrian in Za`tari refugee camp’, *Contemporary Levant*, 2(2), pp. 89–102. Available at: https://doi.org/10.1080/20581831.2017.1377941.

George, S. (2021) ‘Converging the physical and digital with digital twins, mixed reality, and metaverse apps’, *Microsoft Azure*, 26 May. Available at: https://azure.microsoft.com/en-gb/blog/converging-the-physical-and-digital-with-digital-twins-mixed-reality-and-metaverse-apps/ (Accessed: 9 June 2022).

Gerbaudo, P. (2012) *Tweets and the Streets : Social Media and Contemporary Activism*. London: Pluto Press. Available at: https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=501012&site=ehost-live.

van Gerven, Y. (2018) ‘Yori van Gerven (Scopic)’. Available at: https://www.virtualrealitymarketing.com/interviews/yori-van-gerven-scopic/ (Accessed: 3 January 2022).

Ghazal Aswad, N. (2019) ‘Biased neutrality: the symbolic construction of the Syrian refugee in the New York Times’, *Critical Studies in Media Communication*, 36(4), pp. 357–375. Available at: https://doi.org/10.1080/15295036.2019.1628996.

Gigante, M.A. (1993) ‘Virtual Reality: Definitions, History and Applications’, in R.A. Earnshaw, M. A. Gigante, and H. Jones (eds) *Virtual Reality Systems*. Boston: Academic Press, pp. 3–14. Available at: https://doi.org/10.1016/B978-0-12-227748-1.50009-3.

Gilbert, J. (2019) ‘Editorial: This Conjuncture: For Stuart Hall’, *New Formations*, 2019(96). Available at: https://doi.org/10.3898/NEWF:96/97.EDITORIAL.2019.

Gilbert, J. and Williams, A. (2022) *Hegemony Now: How Big Tech and Wall Street Won the World (and How We Win It Back)*. London and New York: Verso Books.

Gills, M. (2016) *Gabo Arora on Making VR with Vrse.works and the United Nations, Tribeca*. Available at: https://tribecafilm.com/news/tribeca-virtual-arcade-my-mothers-wing-gabo-arora-chris-milk-interview (Accessed: 5 June 2022).

Gilmour, R. (2012) *‘Hunger in LA’ makes its mark at Sundance, USC News*. Available at: https://news.usc.edu/32639/hunger-in-l-a-makes-its-mark-at-sundance/ (Accessed: 19 April 2022).

Gilroy, P. (2009) ‘Race and the Right to be Human, Inaugural lecture, Utrecht University’. *Inaugural lecture, Utrecht University, Utrecht*, Utrecht University, Utrecht, 3 December.

Gilroy, P. (2014) ‘Lecture I. Suffering and Infrahumanity; Lecture II. Humanities and a New Humanism’. Tanner Lectures on Human Values. Available at: https://tannerlectures.utah.edu/Gilroy%20manuscript%20PDF.pdf (Accessed: 25 May 2020).

Gilroy, P. (2019) *Long Read | Never Again: Refusing race and salvaging the human*, *New Frame*. Available at: https://www.newframe.com/long-read-refusing-race-and-salvaging-the-human/ (Accessed: 30 January 2020).

Global Migration Data Analysis Centre (2017) *Global Migration Trends Factsheet 2015*.

Germany: International Organization for Migration.

Google (2019) *A VR series about women with the "courage to question", Google*. Available at: https://blog.google/outreach-initiatives/diversity/courage-to-question/ (Accessed: 20 April 2022).

Google.org (no date) *Our approach*. Available at: https://www.google.org/intl/en_uk/our-approach/ (Accessed: 30 March 2023).

Graf, S. (2021) *The Humanity of Universal Crime : Inclusion, Inequality, and Intervention in International Political Thought*. Oxford: Oxford University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=6476756.

Graham, M. and Anwar, M.A. (2019) 'The global gig economy: Towards a planetary labour market?', *First Monday* [Preprint]. Available at: https://doi.org/10.5210/fm.v24i4.9913.

Grayson, D. and Little, B. (2017) 'Conjunctural analysis and the crisis of ideas', *Soundings*, 2017(65). Available at: https://journals.lwbooks.co.uk/soundings/vol-2017-issue-65/abstract-7531/ (Accessed: 2 February 2023).

Greek Council for Refugees (2022) 'Reception and identification procedure', *Asylum Information Database, European Council on Reefugees and Exiles*, 30 May. Available at: https://asylumineurope.org/reports/country/greece/asylum-procedure/access-procedure-and-registration/reception-and-identification-procedure/ (Accessed: 2 July 2022).

Green, N. (1999) 'Disrupting the Field: Virtual Reality Technologies and "Multisited" Ethnographic Methods', *American Behavioral Scientist*, 43(3), pp. 409–421.

Grosfoguel, R. (2007) 'The Epistemic Decolonial Turn', *Cultural Studies*, 21(2–3), pp. 211–223. Available at: https://doi.org/10.1080/09502380601162514.

Gruenewald, T. and Witteborn, S. (2020) 'Feeling good: humanitarian virtual reality film, emotional style and global citizenship', *Cultural Studies*, 0(0), pp. 1–21. Available at: https://doi.org/10.1080/09502386.2020.1761415.

Guardian News & Media press office (2016) 'The Guardian announces virtual reality project team', *The Guardian*, 4 October. Available at: https://www.theguardian.com/gnm-press-office/2016/oct/04/the-guardian-announces-virtual-reality-project-team (Accessed: 6 December 2022).

Guardian News & Media press office (2017) 'Guardian to give away nearly 100,000 Google Cardboard headsets to readers and launches new Guardian VR app for Cardboard', *The Guardian*, 6 October. Available at: https://www.theguardian.com/gnm-press-office/2017/oct/06/guardian-to-give-away-nearly-100000-google-cardboard-headsets-to-readers-and-launches-new-guardian-vr-app-for-cardboard (Accessed: 25 March 2023).

Gürcan, E.C. (2019) 'Extractivism, Neoliberalism, and the Environment: Revisiting the Syrian Conflict from an Ecological Justice Perspective', *Capitalism Nature Socialism*, 30(3), pp. 91–109. Available at: https://doi.org/10.1080/10455752.2018.1516794.

de Haas, H. *et al.* (2019) 'International Migration: Trends, Determinants, and Policy Effects', *Population and Development Review*, 45(4), pp. 885–922. Available at:

https://doi.org/10.1111/padr.12291.

Hacking, I. (2006) ‘Making Up People’, *London Review of Books*, 17 August. Available at: https://www.lrb.co.uk/the-paper/v28/n16/ian-hacking/making-up-people (Accessed: 31 March 2020).

Haddad (2008) *The Refugee in International Society: Between Sovereigns*. Cambridge: Cambridge University Press (Cambridge Studies in International Relations). Available at: https://search.ebscohost.com/login.aspx?direct=true&db=e000xww&AN=221291&site=ehost-live.

Hall, S. *et al.* (2013) *Policing the Crisis: Mugging, the State and Law and Order*. London, United Kingdom: Bloomsbury Publishing. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=4763679.

Hall, S. (2019a) ‘Encoding and Decoding in the Television Discourse’, in D. Morley (ed.) *Essential Essays, Volume 1: Foundations of Cultural Studies*. Durham, United States: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5609562.

Hall, S. (2019b) ‘The West and the Rest: Discourse and Power’, in D. Morley (ed.) *Essential Essays, Volume 2 : Identity and Diaspora*. Durham, United States: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5609563.

Hall, S., Massey, D. and Rustin, M. (2015) ‘After Neoliberalism: Analysing the Present’, in *After Neoliberalism: The Kilburn Manifesto*. London: Lawrence & Wishart, pp. 9–23.

Hamilton, I. (2019) ‘If Logged Into Facebook, Oculus VR Data Will Now Be Used For Ads’, 12 December. Available at: https://uploadvr.com/facebook-ads-vr/ (Accessed: 9 June 2022).

Hammerstad, A. (2014) ‘The Securitization of Forced Migration’, in E. Fiddian-Qasmiyeh et al. (eds) *The Oxford Handbook of Refugee & Forced Migration Studies*. Oxford, United Kingdom: Oxford University Press, pp. 265–277.

Hamouda, I.B. (2021) ‘“A Flyspeck in the Heaving Waters”: Precarious Subjects and Subjectified Precarity in Khaled Hosseini’s Sea Prayer’, in *The Dynamics of Intersubjectivity*. Newcastle upon Tyne: Cambridge Scholars Publishing. Available at: https://books.google.com/books?vid=ISBN152757525X.

Haraway, D. (1988) ‘Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective’, *Feminist Studies*, 14(3), pp. 575–599. Available at: https://doi.org/10.2307/3178066.

Haraway, D. (1991) ‘A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century’, in *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, pp. 149–181.

Harding, S. (1992) ‘RETHINKING STANDPOINT EPISTEMOLOGY: WHAT IS “STRONG OBJECTIVITY?”’, *The Centennial Review*, 36(3), pp. 437–470.

Harley, D. (2022) ‘“This would be sweet in VR”: On the discursive newness of virtual reality’, *New Media & Society*, p. 14614448221084656. Available at:

https://doi.org/10.1177/14614448221084655.

de Hart, B. (2017) ‘Sexuality, Race and Masculinity in Europe’s Refugee Crisis’, in *Migration on the Move: Essays on the Dynamics of Migration*. Leiden, The Netherlands: Brill | Nijhoff (Immigration and Asylum Law and Policy in Europe). Available at: https://brill.com/view/book/edcoll/9789004330467/B9789004330467_004.xml (Accessed: 8 April 2020).

Hartman, S.V. (2003) ‘The Position of Unthought’. University of Nebraska Press. Available at: https://www.jstor.org/stable/20686156 (Accessed: 13 July 2020).

Hayden, S. (2021) ‘Qualcomm Backpedals on 10M Quest 2 Sales Figure, Calls It a ”third-party estimate”’, *Road to VR*, 18 November. Available at: https://www.roadtovr.com/qualcomm-meta-oculus-quest-2-sales/ (Accessed: 16 February 2023).

Hayles, K.N. (1996) ‘Embodied Virtuality: Or How To Put Bodies Back Into the Picture’, in *Immersed in Technology: Art and Virtual Environments*. MIT Press, pp. 1–28. Available at: http://ieeexplore.ieee.org.uea.idm.oclc.org/document/6300716.

Hayles, K.N. (2002) ‘Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments’, *Configurations*, 10(2), pp. 297–320. Available at: https://doi.org/10.1353/con.2003.0015.

Hegarty, S. (2011) ‘How Silicon Valley outsources work to African refugees’, *BBC News*, 18 June. Available at: https://www.bbc.com/news/world-africa-13784487 (Accessed: 15 April 2023).

Heller, C. and Pécoud, A. (2020) ‘Counting Migrants’ Deaths at the Border: From Civil Society Counterstatistics to (Inter)Governmental Recuperation’, *American Behavioral Scientist*, 64(4), pp. 480–500. Available at: https://doi.org/10.1177/0002764219882996.

Hemmings, C. (2012) ‘Affective solidarity: Feminist reflexivity and political transformation’, *Feminist Theory*, 13(2), pp. 147–161.

Henley & Partners (no date) *The Henley Passport Index*, *Henley & Partners*. Available at: https://www.henleyglobal.com/passport-index/ranking (Accessed: 27 January 2023).

Hern, A. (2022) ‘Meta shares dip is proof metaverse plan never really had legs’, *The Guardian*, 27 October. Available at: https://www.theguardian.com/technology/2022/oct/27/metas-shares-dip-is-proof-metaverse-plan-never-really-had-legs-facebook (Accessed: 23 February 2023).

Hernandez, J. (2016) *Refugee Flows to Lesvos: Evolution of a Humanitarian Response*, *migrationpolicy.org*. Available at: https://www.migrationpolicy.org/article/refugee-flows-lesvos-evolution-humanitarian-response (Accessed: 2 July 2022).

Herrera, F. *et al.* (2018) ‘Building long-term empathy: A large-scale comparison of traditional and virtual reality perspective-taking’, *PLOS ONE*, 13(10), p. e0204494. Available at: https://doi.org/10.1371/journal.pone.0204494.

Holmes, S.M. and Castañeda, H. (2016) ‘Representing the “European refugee crisis” in

Germany and beyond: Deservingness and difference, life and death', *American Ethnologist*, 43(1), pp. 12–24. Available at: https://doi.org/10.1111/amet.12259.

Hopkins, M. (2017) 'Pioneering Virtual Reality and New Video Technologies in Journalism', *The New York Times*, 18 October. Available at: https://www.nytimes.com/2017/10/18/technology/personaltech/virtual-reality-video.html (Accessed: 21 April 2022).

Hosseini, K. (2018a) 'Author Khaled Hosseini Tells His Refugee Story And How It Inspired Syrian Story "Sea Prayer"'. Available at: https://www.youtube.com/watch?v=tNN-KomzmuM (Accessed: 12 October 2022).

Hosseini, K. (2018b) 'Khaled Hosseini: Refugees are still dying. How do we get over our news fatigue?', *The Guardian*, 17 August. Available at: https://www.theguardian.com/books/2018/aug/17/khaled-hosseini-refugees-migrants-stories (Accessed: 11 October 2022).

Hosseini, K. (2018c) '"Sheer despair drives people to put their loved ones on these rubber boats" Khaled Hosseini; The Kite Runner author, doctor and refugee'. Available at: https://link.gale.com/apps/doc/A550668292/STND?u=univea&sid=bookmark-STND&xid=2baccfd2 (Accessed: 14 September 2022).

Howe, D. (2013) *Empathy: what it is and why it matters*. Hampshire: Palgrave Macmillan.

Howson, K. *et al.* (2022) 'Driving the digital value network: Economic geographies of global platform capitalism', *Global Networks*, 22(4), pp. 631–648. Available at: https://doi.org/10.1111/glob.12358.

HTC Vive (2017) *VR for Impact, VIVE Blog*. Available at: https://blog.vive.com/us/2017/01/19/vr-for-impact/ (Accessed: 28 April 2022).

Hudson, V. (2016) *Europe's Man Problem: Migrants to Europe skew heavily male - and that's dangerous*, *POLITICO Magazine*. Available at: https://www.politico.com/magazine/story/2016/01/europe-refugees-migrant-crisis-men-213500 (Accessed: 10 March 2023).

Human Rights Watch (1996) *Syria: The Silenced Kurds*. Vol. 8, No.4. Available at: https://www.hrw.org/legacy/summaries/s.syria9610.html (Accessed: 28 March 2023).

Human Rights Watch (2018a) 'Greece: Dire Conditions for Asylum Seekers on Lesbos', *Human Rights Watch*, 21 November. Available at: https://www.hrw.org/news/2018/11/21/greece-dire-conditions-asylum-seekers-lesbos (Accessed: 11 July 2022).

Human Rights Watch (2018b) 'Turkey Stops Registering Syrian Asylum Seekers', *Human Rights Watch*, 16 July. Available at: https://www.hrw.org/news/2018/07/16/turkey-stops-registering-syrian-asylum-seekers (Accessed: 3 September 2022).

Hunt, L. (2007) *Inventing Human Rights: A History*. New York, USA: W.W. Norton & Company.

Hyndman, J. (2000) *Managing Displacement: Refugees and the Politics of Humanitarianism*.

University of Minnesota Press. Available at: https://www.upress.umn.edu/book-division/books/managing-displacement (Accessed: 6 January 2020).

Ibrahim, Y. (2018) 'The Unsacred and the Spectacularized: Alan Kurdi and the Migrant Body', *Social Media + Society*, 4(4), p. 2056305118803884. Available at: https://doi.org/10.1177/2056305118803884.

InfoMigrants (2022) *Afghan man acquitted over son's death on journey to Greece*, *InfoMigrants*. Available at: https://www.infomigrants.net/en/post/40616/afghan-man-acquitted-over-sons-death-on-journey-to-greece (Accessed: 30 March 2023).

Innes, A.J. (2010) 'When the Threatened Become the Threat: The Construction of Asylum Seekers in British Media Narratives', *International Relations*, 24(4), pp. 456–477. Available at: https://doi.org/10.1177/0047117810385882.

International Data Corporation (2023) *Global Shipments of AR/VR Headsets Decline Sharply in 2022 Following the Prior Year's Strong Results, According to IDC*, *IDC*. Available at: https://www.idc.com/getdoc.jsp?containerId=prUS50467723 (Accessed: 2 May 2023).

International Organization for Migration (2015) *Over 3,770 Migrants Have Died Trying to Cross the Mediterranean to Europe in 2015*, *International Organization for Migration*. Available at: https://www.iom.int/news/over-3770-migrants-have-died-trying-cross-mediterranean-europe-2015 (Accessed: 28 March 2023).

International Organization for Migration (2023) *Missing Migrants Project*, *Missing Migrants Project*. Available at: https://missingmigrants.iom.int/region/mediterranean (Accessed: 30 March 2023).

International Rescue Committee (2016) *How virtual reality lets us see the Syrian refugee crisis with fresh eyes | International Rescue Committee (IRC)*, *International Rescue Committee*. Available at: https://www.rescue.org/article/how-virtual-reality-lets-us-see-syrian-refugee-crisis-fresh-eyes (Accessed: 16 February 2023).

International Telecommunication Unit (2022) *Statistics*, *ITU*. Available at: https://www.itu.int:443/en/ITU-D/Statistics/Pages/stat/default.aspx (Accessed: 10 February 2023).

Irom, B. (2018) 'Virtual Reality and the Syrian Refugee Camps: Humanitarian Communication and the Politics of Empathy', *International Journal of Communication*, 12(0), p. 23.

Irwin, V. (2022) *Meta is looking into eye-tracking and product placement to make money in the metaverse*, *Protocol*. Available at: https://www.protocol.com/bulletins/metas-tracking-you (Accessed: 9 June 2022).

Jackson, J. (2015) 'New York Times links with Google for VR project', *The Guardian*, 20 October. Available at: https://www.theguardian.com/media/2015/oct/20/new-york-times-google-nyt-vr-cardboard-virtual-reality (Accessed: 25 March 2023).

Jackson, Z.I. (2020) *Becoming Human : Matter and Meaning in an Antiblack World*. New York, United States: New York University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=6134173.

Jacobsen, K. and Landau, L.B. (2003) 'The Dual Imperative in Refugee Research: Some Methodological and Ethical Considerations in Social Science Research on Forced Migration', *Disasters*, 27(3), pp. 185–206. Available at: https://doi.org/10.1111/1467-7717.00228.

Jarvis, L. (2019) *Immersive Embodiment: Theatres of Mislocalized Sensation*. Palgrave Macmillan (Palgrave Studies in Performance and Technology).

Jesuit Refugee Service Canada (no date) *A Journey into Exile, JRS Canada*. Available at: https://canada.jrs.net/en/a-journey-into-exile/ (Accessed: 24 February 2022).

Johnson, H.L. (2011) 'Click to Donate: visual images, constructing victims and imagining the female refugee', *Third World Quarterly*, 32(6), pp. 1015–1037. Available at: https://doi.org/10.1080/01436597.2011.586235.

Johnston, M. (2022) *How Facebook (Meta) Makes Money*, *Investopedia*. Available at: https://www.investopedia.com/ask/answers/120114/how-does-facebook-fb-make-money.asp (Accessed: 9 June 2022).

Jones, O. (2015) 'Refugees are human. This simple fact seems to have been forgotten | Owen Jones', *The Guardian*, 28 August. Available at: https://www.theguardian.com/commentisfree/2015/aug/28/migrants-humans-drowning-suffocating-safety-statistics (Accessed: 2 March 2020).

josoor (2020) 'November 28, 2020 20:00 – Pythion/Kurttepe – Border Violence Monitoring Network', *Border Violence Monitoring Network*, 7 December. Available at: https://www.borderviolence.eu/violence-reports/november-28-2020-2000-pythion-kurttepe/ (Accessed: 16 November 2022).

Kaba, M. and Nopper, T.K. (2021) 'Itemizing Atrocity', in T.K. Nopper (ed.) *We do this 'til we free us: Abolitionist organizing and transforming justice*. Chicago: Haymarket Books.

Kafer, A. (2013) *Feminist, Queer, Crip*. Bloomington, United States: Indiana University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1189107.

Kalinga C. (2021) *Chisomo Kalinga, PhD on Twitter, Twitter*. Available at: https://twitter.com/MissChisomo/status/1462698826628743174 (Accessed: 4 February 2022).

Kalir, B. and Rozakou, K. (2016) *"Giving Form To Chaos": The Futility Of EU Border Management At Moria Hotspot In Lesvos, Society and Space*. Available at: https://www.societyandspace.org/articles/giving-form-to-chaos-the-futility-of-eu-border-management-at-moria-hotspot-in-lesvos (Accessed: 11 July 2022).

Kangasniemi, J. (2021) *From empty hype to a crucial tool: pushing the boundaries of immersive journalism*. Oxford: Reuters Institute for the Study of Journalism, Univesity of Oxford, pp. 1–41.

Kanngieser, A. and Todd, Z. (2020) 'From Environmental Case Study to Environmental Kin Study', *History and Theory*, 59(3), pp. 385–393. Available at: https://doi.org/10.1111/hith.12166.

Kapoor, N. (2018) *Deport Deprive Extradite: 21st Century State Extremism*. London; New York: Verso Books.

Karagiannopoulos, V. (2012) 'The Role of the Internet in Political Struggles: Some Conclusions from Iran and Egypt', *New Political Science*, 34(2), pp. 151–171. Available at: https://doi.org/10.1080/07393148.2012.676394.

Karatani, R. (2005) 'How History Separated Refugee and Migrant Regimes: In Search of Their Institutional Origins', *International Journal of Refugee Law*, 17(3), pp. 517–541. Available at: https://doi.org/10.1093/ijrl/eei019.

Katz, Y. (2021) *How Microsoft is invested in Israeli settler-colonialism*, *Mondoweiss*. Available at: https://mondoweiss.net/2021/03/how-microsoft-is-invested-in-israeli-settler-colonialism/ (Accessed: 14 April 2023).

Kaya, H. (2020) *The EU-Turkey Statement on Refugees*. Edward Elgar Publishing. Available at: https://www.elgaronline.com/display/9781789909203.00007.xml (Accessed: 28 March 2023).

Keen, S. (2006) 'A Theory of Narrative Empathy', *Narrative*, 14(3), pp. 207–236.

Kelly, J. (2023) 'Whatever happened to the metaverse?', *Financial Times*, 16 February. Available at: https://www.ft.com/content/bddec314-3f4c-4296-ae6f-eb2a5328c109 (Accessed: 23 February 2023).

Khamis, S., Gold, P.B. and Vaughn, K. (2012) 'Beyond Egypt's "Facebook Revolution" and Syria's "YouTube Uprising": Comparing Political Contexts, Actors and Communication Strategies', *Arab Media & Society*, 15(Spring).

Khan, A.R. (2015) 'Alan Kurdi's father on his family tragedy: "I should have died with them"', *The Guardian*, 22 December. Available at: https://www.theguardian.com/world/2015/dec/22/abdullah-kurdi-father-boy-on-beach-alan-refugee-tragedy (Accessed: 30 March 2023).

Kharpal, A. (2023) *Samsung is 'working out' a roadmap for mixed reality devices as rumors of an Apple headset swirl, CNBC*. Available at: https://www.cnbc.com/2023/03/01/mwc-samsung-is-working-out-a-roadmap-for-mixed-reality-devices.html (Accessed: 17 March 2023).

Khiabany, G. (2016) 'Refugee crisis, imperialism and pitiless wars on the poor', *Media, Culture & Society*, 38(5). Available at: https://doi.org/10.1177/0163443716655093.

Kilteni, K., Groten, R. and Slater, M. (2012) 'The Sense of Embodiment in Virtual Reality', *Presence: Teleoperators and Virtual Environments*, 21(4), pp. 373–387. Available at: https://doi.org/10.1162/PRES_a_00124.

Kim, J. (2021) 'Advertising in the Metaverse: Research Agenda', *Journal of Interactive Advertising*, 21(3), pp. 141–144. Available at: https://doi.org/10.1080/15252019.2021.2001273.

Ki-moon, B. (2016) *Refugees and Migrants: A Crisis of Solidarity, United Nations Secretary-General*. Available at: https://www.un.org/sg/en/content/sg/articles/2016-05-09/refugees-and-migrants-crisis-solidarity (Accessed: 8 January 2020).

Kipman, A. (2021) *Army moves Microsoft HoloLens-based headset from prototyping to*

production phase, The Official Microsoft Blog. Available at: https://blogs.microsoft.com/blog/2021/03/31/army-moves-microsoft-hololens-based-headset-from-prototyping-to-production-phase/ (Accessed: 10 May 2022).

Kirkwood, S. (2017) 'The Humanisation of Refugees: A Discourse Analysis of UK Parliamentary Debates on the European Refugee "Crisis"', *Journal of Community & Applied Social Psychology,* 27(2), pp. 115–125. Available at: https://doi.org/10.1002/casp.2298.

Kool, H. (2016) 'The Ethics of Immersive Journalism: A rhetorical analysis of news storytelling with virtual reality technology', *Intersect: The Stanford Journal of Science, Technology, and Society*, 9(3). Available at: http://ojs.stanford.edu/ojs/index.php/intersect/article/view/871 (Accessed: 15 October 2019).

Krzyżanowski, M., Triandafyllidou, A. and Wodak, R. (2018) 'The Mediatization and the Politicization of the "Refugee Crisis" in Europe', *Journal of Immigrant & Refugee Studies,* 16(1–2), pp. 1–14. Available at: https://doi.org/10.1080/15562948.2017.1353189.

Kuang, C. *et al.* (2023) *Demystifying the Consumer Metaverse*. Accenture and World Economic Forum.

Kyriakidou, M. (2021) 'Hierarchies of deservingness and the limits of hospitality in the "refugee crisis"', *Media, Culture & Society,* 43(1), pp. 133–149. Available at: https://doi.org/10.1177/0163443720960928.

Lanier, J. (1989) 'An Interview with Jaron Lanier'.

Lanier, J. (2017) *Dawn of the New Everything: Encounters with Reality and Virtual Reality*. New York: Henry Holt and Co.

Lanzoni, S. (2018) *Empathy: A History*. New Haven, UNITED STATES: Yale University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5508363 (Accessed: 27 May 2020).

Laqueur, T.W. (2009) 'Mourning, Pity, and the Work of Narrative in the Making of "Humanity"', in *Humanitarianism and Suffering: The Mobilization of Empathy*. New York: Cambridge University Press.

Lee, S. and Feeley, T.H. (2016) 'The identifiable victim effect: a meta-analytic review', *Social Influence,* 11(3), pp. 199–215. Available at: https://doi.org/10.1080/15534510.2016.1216891.

Legal Centre Lesvos (2021) '5 years of violence and misery under the EU-Turkey deal', 16 March. Available at: https://legalcentrelesvos.org/2021/03/16/5-years-of-violence-and-misery-under-the-eu-turkey-deal/ (Accessed: 11 July 2022).

Lemberg-Pedersen, M. (2012) 'Private security companies and the European borderscapes', in T. Gammeltoft-Hansen and N. Nyberg-Sørensen (eds) *The Migration Industry and the Commercialization of International Migration*. First edition. Routledge, pp. 152–172. Available at: https://doi.org/10.4324/9780203082737.

Lemberg-Pedersen, M., Hansen, J.R. and Halpern, O.J. (2020) *The Political Economy of Entry Governance*. Copenhagen, Aalborg University.

Lentin, A. (2020) *Why Race Still Matters*. Polity Press. Available at: https://search.ebscohost.com/login.aspx?direct=true&db=cat07845a&AN=uea.1153857829&authtype=sso&custid=s8993828&site=eds-live&scope=site.

Leonardo (2022) *Shareholders Base, Leonardo*. Available at: https://www.leonardo.com/en/investors/stock-info/shareholders-base (Accessed: 17 February 2023).

Lesbos Refugees (2015). Available at: https://www.youtube.com/watch?v=y-tthKKRzac (Accessed: 22 June 2022).

Leurs, K. and Smets, K. (2018) 'Five Questions for Digital Migration Studies: Learning From Digital Connectivity and Forced Migration In(to) Europe', *Social Media + Society*, 4(1), p. 2056305118764425. Available at: https://doi.org/10.1177/2056305118764425.

Little, A. and Vaughan-Williams, N. (2017) 'Stopping boats, saving lives, securing subjects: Humanitarian borders in Europe and Australia', *European Journal of International Relations*, 23(3), pp. 533–556. Available at: https://doi.org/10.1177/1354066116661227.

Little, B. and Winch, A. (2021) *The New Patriarchs of Digital Capitalism: Celebrity Tech Founders and Networks of Power*. Routledge. Available at: https://doi-org.uea.idm.oclc.org/10.4324/9780429291005.

Littler, J. (2016) 'On not being at CCCS', in M. Hilton and K. Connell (eds) *Cultural Studies 50 Years On: History, Practice and Politics*. Rowman & Littlefield International. Available at: https://openaccess.city.ac.uk/id/eprint/14434/.

Lockheed Martin (2015) *New £51m Chinook Helicopter Simulators and Training System for RAF, Lockheed Martin*. Available at: https://lockheedmartinuk.mediaroom.com/2015-06-02-new-51-m-chinook-helicopter-simulators-and-training-system-for-raf (Accessed: 6 December 2022).

Long, K. (2013) 'When refugees stopped being migrants: Movement, labour and humanitarian protection', *Migration Studies*, 1(1), pp. 4–26. Available at: https://doi.org/10.1093/migration/mns001.

Lowe, L. (2015) *The Intimacies of Four Continents*. Durham and London: Duke University Press. Available at: https://doi.org/10.1215/9780822375647.

Lubkemann, S.C. (2008) 'Involuntary Immobility: On a Theoretical Invisibility in Forced Migration Studies', *Journal of Refugee Studies*, 21(4), pp. 454–475. Available at: https://doi.org/10.1093/jrs/fen043.

Lugones, M. (2008) 'The Coloniality of Gender', *On the De-Colonial (II): Gender and Decoloniality, Worlds & Knowledges Otherwise*, 2(Dissuer 2), pp. 1–17.

Lugones, M. (2010) 'Toward a Decolonial Feminism', *Hypatia*, 25(4), pp. 742–759.

Luibhéid, E. (2013) 'Reproductive Futurism and the Temporality of Migration Control', in *Pregnant on Arrival: Making the Illegal Immigrant*. University of Minnesota Press, pp. 149–174. Available at: https://ebookcentral.proquest.com/lib/uea/detail.action?docID=1357299. (Accessed: 19 September 2022).

MacGregor, M. (2019) *EU-Turkey deal has left Syrians in limbo, InfoMigrants*. Available at: https://www.infomigrants.net/en/post/17507/euturkey-deal-has-left-syrians-in-limbo (Accessed: 11 July 2022).

Mackey, R. (2015) 'Brutal Images of Syrian Boy Drowned Off Turkey Must Be Seen, Activists Say', *The New York Times*, 2 September. Available at: https://www.nytimes.com/2015/09/03/world/middleeast/brutal-images-of-syrian-boy-drowned-off-turkey-must-be-seen-activists-say.html (Accessed: 27 August 2022).

Madianou, M. (2019) 'Technocolonialism: Digital Innovation and Data Practices in the Humanitarian Response to Refugee Crises', *Social Media + Society*, 5(3), p. 2056305119863146. Available at: https://doi.org/10.1177/2056305119863146.

Magalhães, J.C. and Couldry, N. (2021) 'Giving by Taking Away: Big Tech, Data Colonialism, and the Reconfiguration of Social Good', *International Journal of Communication*, 15, p. 20.

Maldonado-Torres, N.G.E. (2011) 'Thinking through the Decolonial Turn: Post-continental Interventions in Theory, Philosophy, and Critique—An Introduction', 1(2). Available at: https://doi.org/10.5070/T412011805.

Malkki, L. (1994) 'Citizens of Humanity: Internationalism and the Imagined Community of Nations', *Diaspora: A Journal of Transnational Studies*, 3(1), pp. 41–68. Available at: https://doi.org/10.1353/dsp.1994.0013.

Malkki, L.H. (1996) 'Speechless Emissaries: Refugees, Humanitarianism, and Dehistoricization', *Cultural Anthropology*, 11(3), pp. 377–404.

Malkki, L.H. (2010) 'Children, Humanity, and the Infantilization of Peace', in *In the Name of Humanity: The Government of Threat and Care*. Duke University Press, p. pp.58-85.

Malm, A. and Hornborg, A. (2014) 'The geology of mankind? A critique of the Anthropocene narrative', *The Anthropocene Review*, 1(1), pp. 62–69. Available at: https://doi.org/10.1177/2053019613516291.

Malmo, C. (2014) 'A New Virtual Reality Tool Brings the Daily Trauma of the Syrian War to Life', *Vice*, 23 August. Available at: https://www.vice.com/en/article/jp5jx3/virtual-reality-is-bringing-the-syrian-war-to-life (Accessed: 13 April 2022).

Mann, L. (2018) 'Left to Other Peoples' Devices? A Political Economy Perspective on the Big Data Revolution in Development', *Development and Change*, 49(1), pp. 3–36. Available at: https://doi.org/10.1111/dech.12347.

Manne, K. (2016) 'Humanism: A Critique', *Social Theory and Practice*, 42(2), pp. 389–415. Available at: https://doi.org/10.5840/soctheorpract201642221.

Manne, K. (2018) *Down Girl: The Logic of Misogyny*. New York: Oxford University Press.

MarketScreener (2023) *AIRBUS SE, MarketScreener*. Available at: https://www.marketscreener.com/quote/stock/AIRBUS-SE-4637/company/ (Accessed: 17 February 2023).

Marks, L.U. and Polan, D. (2000) *The Skin of the Film : Intercultural Cinema, Embodiment, and the Senses*. North Carolina, United States: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1167652.

Marsh, D. (2015) 'We deride them as "migrants". Why not call them people? | David Marsh', *The Guardian*, 28 August. Available at: https://www.theguardian.com/commentisfree/2015/aug/28/migrants-people-refugees-humanity (Accessed: 1 April 2020).

Martingano, A.J., Hererra, F. and Konrath, S. (2021) 'Virtual Reality Improves Emotional but Not Cognitive Empathy: A Meta-Analysis', *Technology, Mind, and Behavior*, 2(1). Available at: https://doi.org/10.1037/tmb0000034.

Massumi, B. (2002) *Parables for the Virtual: Movement, Affect, Sensation*. Durham, United States: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1167818 (Accessed: 27 May 2020).

Matera, M., Tubakovic, T. and Murray, P. (2023) 'Is Australia a Model for the UK? A Critical Assessment of Parallels of Cruelty in Refugee Externalization Policies', *Journal of Refugee Studies* [Preprint]. Available at: https://doi.org/10.1093/jrs/fead016.

Matney, L. and Buhr, S. (2016) 'Verizon's AOL's Huffington Post acquires virtual reality studio RYOT for $10 to $15 million', *TechCrunch*, 20 April. Available at: https://techcrunch.com/2016/04/20/verizons-aols-huffington-post-acquires-virtual-reality-studio-ryot/ (Accessed: 6 December 2022).

Mayblin, L. (2017) *Asylum after Empire: Colonial Legacies in the Politics of Asylum Seeking*. London: Rowman & Littlefield International.

Mayblin, L., Wake, M. and Kazemi, M. (2019) 'Necropolitics and the Slow Violence of the Everyday: Asylum Seeker Welfare in the Postcolonial Present', *Sociology*, 54(1), pp. 107–123. Available at: https://doi.org/10.1177/0038038519862124.

Mazzucato, M. (2014) *Entrepreneurial State: Debunking Public vs. Private Myths in Risk and Innovation*. Revised Edition. London and New York: Anthem Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1076687.

Mbembe, A. (2003) 'Necropolitics', *Public Culture*, 15(1), pp. 11–40. Available at: https://doi.org/10.1215/08992363-15-1-11.

McCauley, M.E. and Sharkey, T.J. (1992) 'Cybersickness: Perception of Self-Motion in Virtual Environments', *Presence: Teleoperators and Virtual Environments*, 1(3), pp. 311–318. Available at: https://doi.org/10.1162/pres.1992.1.3.311.

McKinsey & Company (2022) *Value creation in the metaverse: The real business of the virtual world*.

McLaughlin, C. (2018) '"They don't look like children": child asylum-seekers, the Dubs amendment and the politics of childhood', *Journal of Ethnic and Migration Studies*, 44(11), pp. 1757–1773. Available at: https://doi.org/10.1080/1369183X.2017.1417027.

McLuhan, M. (2013) *Understanding Media : The Extensions of Man*. Corte Madera, United States: Gingko Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1222206.

Meier, P. (2011) 'New information technologies and their impact on the humanitarian sector', *International Review of the Red Cross*, 93(884), pp. 1239–1263. Available at: https://doi.org/10.1017/S1816383112000318.

Melissen, H.J. (2016) 'Campus Party Europe #4 Digital - Hans Jaap Melissen'. *Campus Party Europe*, 29 June. Available at: https://www.youtube.com/watch?v=kOOA7eSHcDs (Accessed: 27 February 2023).

Mertz, L. (2019) *Virtual Reality Pioneer Tom Furness on the Past, Present, and Future of VR in Health Care – EMBS, Institute of Electrical and Electronics Engineers*. Available at: https://www.embs.org/pulse/articles/virtual-reality-pioneer-tom-furness-on-the-past-present-and-future-of-vr-in-health-care/ (Accessed: 8 May 2022).

Meta (2022) *Supplemental Oculus Data Policy, Meta*. Available at: https://store.facebook.com/gb/legal/quest/privacy-policy (Accessed: 9 June 2022).

Meta (no date) *VR for Good | Virtual Reality Storytelling Focused on Social Impact, Meta*. Available at: https://about.meta.com/uk/community/vr-for-good/ (Accessed: 14 February 2023).

Meta Quest (no date) *VR for Good | Oculus*. Available at: https://www.oculus.com/vr-for-good/ (Accessed: 21 April 2022).

Meyer, M.A. (2008) 'Indigenous and Authentic: Hawaiian Epistemology and the Triangulation of Meaning', in. Thousand Oaks, California: SAGE Publications, pp. 217–232. Available at: https://doi.org/10.4135/9781483385686.

Mezzadra, S. (2020) 'Abolitionist vistas of the human. Border struggles, migration and freedom of movement', *Citizenship Studies*, pp. 1–17. Available at: https://doi.org/10.1080/13621025.2020.1755156.

Mezzadra, S. and Neilson, B. (2013) *Border As Method, or, the Multiplication of Labor*. Durham, US: Duke University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1603738.

Microsoft (2020) *Why does Microsoft have an office at the UN? A Q&A with the company's UN lead, Microsoft On The Issues*. Available at: https://news.microsoft.com/on-the-issues/2020/10/05/un-affairs-lead-john-frank-unga/ (Accessed: 20 April 2022).

Microsoft (2021) *Annual Report 2021*. Available at: https://www.microsoft.com/investor/reports/ar21/index.html.

Mignolo, W.D. (2002) 'The Geopolitics of Knowledge and the Colonial Difference', *The South Atlantic Quarterly*, 101(1).

Mignolo, W.D. (2018a) 'The Invention of the Human and the Three Pillars of the Colonial Matrix of Power: Racism, Sexism, and Nature', in Mignolo, W. D. and Walsh, C. E., *On Decoloniality: Concepts, Analytics, Praxis*. Durham, United States: Duke University Press,

pp. 153–176. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5400137 (Accessed: 28 April 2020).

Mignolo, W.D. (2018b) 'What Does It Mean to Decolonize?', in Mignolo, W. D. and Walsh, C. E., *On Decoloniality: Concepts, Analytics, Praxis*. Durham, United States: Duke University Press, pp. 105–134. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5400137 (Accessed: 28 April 2020).

Milk, C. (2015) 'How virtual reality can create the ultimate empathy machine'. TED Talk, March. Available at: https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine/transcript (Accessed: 22 March 2020).

Milk, C. (2020) 'VR's opportunity: Chris Milk on immersive media in quarantine - Protocol'. Available at: https://www.protocol.com/vr-exercise-within-supernatural (Accessed: 6 January 2023).

Milk, C. (2021) 'Is VR the next frontier in fitness?' Available at: https://www.theverge.com/22379859/vr-virtual-reality-fitness-work-out-supernatural-chris-milk-interview (Accessed: 17 March 2023).

Milk, C. and Arora, G. (2015) *How virtual reality makes the world a better place, World Economic Forum*. Available at: https://www.weforum.org/agenda/2015/09/how-virtual-reality-makes-the-world-a-better-place/ (Accessed: 10 February 2021).

Miller, M.R. *et al.* (2020) 'Personal identifiability of user tracking data during observation of 360-degree VR video', *Scientific Reports*, 10(1), p. 17404. Available at: https://doi.org/10.1038/s41598-020-74486-y.

Miller, T. (2021) 'A lucrative border-industrial complex keeps the US border in constant "crisis"', *The Guardian*, 19 April. Available at: https://www.theguardian.com/commentisfree/2021/apr/19/a-lucrative-border-industrial-complex-keeps-the-us-border-in-constant-crisis (Accessed: 16 February 2023).

Minh-ha, T.T. (1989) 'Commitment from the Mirror-Writing Box', in *Woman , Native, Other: Writing Postcoloniality and Feminism*. Bloomington and Indianapolis: Indiana University Press, pp. 5–44.

Ministry of Defence, Defence Equipment and Support and Lancaster, M. (2018) *New Chinook simulators ready for training, GOV.UK*. Available at: https://www.gov.uk/government/news/new-chinook-simulators-ready-for-training (Accessed: 7 June 2022).

MIT Open Documentary Lab and MIT Comparative Media Studies/Writing (no date) *Gone Gitmo, Docubase*. Available at: https://docubase.mit.edu/project/gone-gitmo/ (Accessed: 19 April 2022).

Mohanty, C.T. (2003) *Feminism Without Borders: Decolonizing Theory, Practicing Solidarity*. Durham and London: Duke University Press.

Mondon, A. and Winter, A. (2019) ‘Whiteness, populism and the racialisation of the working class in the United Kingdom and the United States’, *Identities*, 26(5), pp. 510–528. Available at: https://doi.org/10.1080/1070289X.2018.1552440.

Montagut, M. and Moragas-Fernández, C.M. (2020) ‘The European Refugee Crisis Discourse in the Spanish Press: Mapping Humanization and Dehumanization Frames Through Metaphors’, *International Journal of Communication*, 14, pp. 69–91.

Moreton-Robinson, A. (2013) ‘Towards an Australian Indigenous Women’s Standpoint Theory’, *Australian Feminist Studies*, 28(78), pp. 331–347. Available at: https://doi.org/10.1080/08164649.2013.876664.

Morris-Suzuki, T. (2005) *The Past Within Us: Media, Memory, History*. London; New York: Verso Books.

Mortensen, M. (2017) ‘Constructing, confirming, and contesting icons: the Alan Kurdi imagery appropriated by #humanitywashedashore, Ai Weiwei, and Charlie Hebdo’, *Media, Culture & Society*, 39(8), pp. 1142–1161. Available at: https://doi.org/10.1177/0163443717725572.

Mortensen, M. and Grønlykke Mollerup, N. (2021) ‘The Omran Daqneesh imagery from the streets of Aleppo to international front pages: Testimony, politics and emotions’, *Global Media and Communication*, 17(2), pp. 261–277. Available at: https://doi.org/10.1177/17427665211021617.

Moser, C. (2020) *A very short introduction to Frontex*, *Max-Planck-Gesellschaft*. Available at: https://www.mpg.de/14588889/frontex (Accessed: 10 February 2023).

Most Shocking Second a Day Video (2014). Available at: https://www.youtube.com/watch?v=RBQ-IoHfimQ (Accessed: 2 April 2021).

Munif, Y. (2020) *The Syrian Revolution: Between the Politics of Life and the Geopolitics of Death*. London: Pluto Press.

Muñoz, J.E. (2019) *Cruising Utopia: The Then and There of Queer Futurity*. 10th Anniversary Edition. New York University Press. Available at: https://doi.org/10.18574/nyu/9781479868780.001.0001.

Murphy, H. (2022) ‘Facebook patents reveal how it intends to cash in on metaverse’, *Financial Times*, 18 January. Available at: https://www.ft.com/content/76d40aac-034e-4e0b-95eb-c5d34146f647.

Murphy, H., Johnston, I. and Criddle, C. (2022) ‘Meta job cuts provide a post-pandemic reality check: “The bubble has burst”’, *Financial Times*, 10 November.

Nader, L. (1972) ‘Up the Anthropologist: Perspectives Gained From Studying Up.’

Nafarrete, J. (2017) ‘HTC Vive Launches $10 Million VR Fund For Social Good’, *VRScout*, 19 January. Available at: https://vrscout.com/news/htc-vive-10-million-vr-fund-social-good/ (Accessed: 18 April 2022).

Nagel, C. (2019) ‘Populism, immigration and the Trump phenomenon in the U.S.’,

Environment and Planning C: Politics and Space, 37(1), pp. 12–16. Available at: https://doi.org/10.1177/0263774X18811923c.

Naguib, N. (2018) 'Casualties of Fatherhood: Syrian Refugee Men and Nurturance in the Arctic', in M.C. Inhorn (ed.) *Reconceiving Muslim Men : Love and Marriage, Family and Care in Precarious Times*. New York, USA: Berghahn Books, Incorporated, pp. 279–297. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5433081.

Nakamura, L. (1995) 'Race In/For Cyberspace: Identity Tourism and Racial Passing on the Internet', *Works and Days*, 13, pp. 181–193.

Nakamura, L. (2020) 'Feeling good about feeling bad: virtuous virtual reality and the automation of racial empathy', *Journal of Visual Culture*, 19(1), pp. 47–64. Available at: https://doi.org/10.1177/1470412920906259.

Narayan, D. (2022) 'Platform capitalism and cloud infrastructure: Theorizing a hyper-scalable computing regime', *Environment and Planning A: Economy and Space*, p. 0308518X221094028. Available at: https://doi.org/10.1177/0308518X221094028.

Narayan, J. (2017) 'The wages of whiteness in the absence of wages: racial capitalism, reactionary intercommunalism and the rise of Trumpism', *Third World Quarterly*, 38(11), pp. 2482–2500. Available at: https://doi.org/10.1080/01436597.2017.1368012.

Nash, K. (2018) 'Virtual reality witness: exploring the ethics of mediated presence', *Studies in Documentary Film*, 12(2), pp. 119–131. Available at: https://doi.org/10.1080/17503280.2017.1340796.

Naval Air Station Fort Lauderdale Museum (no date) *Link Trainer Flight Simulator*, *Naval Air Station Fort Lauderdale Museum*. Available at: https://www.nasflmuseum.com/link-trainer.html (Accessed: 8 May 2022).

Nayeri, D. (2017) 'The ungrateful refugee: "We have no debt to repay"', *The Guardian*, 4 April. Available at: https://www.theguardian.com/world/2017/apr/04/dina-nayeri-ungrateful-refugee (Accessed: 1 April 2020).

Nayeri, D. (2019a) 'Dina Nayeri Doesn't Want To Miss Anyone's Pain'. Available at: https://www.nylon.com/dina-nayeri-interview-ungrateful-refugee (Accessed: 29 March 2023).

Nayeri, D. (2019b) *The Ungrateful Refugee*. Canongate Books.

Ndlovu-Gatsheni, S.J. (2015) 'Decoloniality as the Future of Africa', *History Compass*, 13(10), pp. 485–496. Available at: https://doi.org/10.1111/hic3.12264.

Ndlovu-Gatsheni, S.J. (2016) *The Decolonial Mandela: Peace, Justice and the Politics of Life*. New York, United States: Berghahn Books.

Ngai, S. (2005) *Ugly Feelings*. Cambridge, United States: Harvard University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=3300232.

Nguyen, V.T. (ed.) (2018) 'Introduction', in *The Displaced: Refugee Writers on Refugee Lives*. New York: Abrams Press.

Noble, S.U. (2018) *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York: New York University Press.

Novet, J. (2021) *Microsoft wins U.S. Army contract for augmented reality headsets, worth up to $21.9 billion over 10 years*, *CNBC*. Available at: https://www.cnbc.com/2021/03/31/microsoft-wins-contract-to-make-modified-hololens-for-us-army.html (Accessed: 10 May 2022).

Nyers, P. (2006) *Rethinking Refugees: Beyond States of Emergency*. Oxford ; New York: Routledge.

Nyong'o, T. (2014) 'Black Humanitarianism', in Rebecka Rutledge Fisher and Jay Garcia (eds) *Retrieving the Human: Reading Paul Gilroy*. Albany: SUNY Press (SUNY Series, Philosophy and Race). Available at: https://search.ebscohost.com/login.aspx?direct=true&db=e000xww&AN=840838&site=ehost-live.

Oka, M. (2019) 彼女の「正しい」名前とは何か　第三フェミニズムの思想. Seidosha.

Olesen, T. (2018) 'Memetic protest and the dramatic diffusion of Alan Kurdi', *Media, Culture & Society*, 40(5), pp. 656–672. Available at: https://doi.org/10.1177/0163443717729212.

Omdia (2021) *Omdia research reveals 12.5m consumer VR headsets sold in 2021 with content spend exceeding $2bn*, *Omdia*. Available at: https://omdia.tech.informa.com/pr/2021-dec/omdia-research-reveals-12m-consumer-vr-headsets-sold-in-2021-with-content-spend-exceeding-2bn (Accessed: 20 April 2022).

O'Neill, M. and Roberts, B. (2019) *Walking Methods : Research on the Move*. Milton, UNITED KINGDOM: Taylor & Francis Group. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5812490.

Ong, A. (2006) 'Mutations in Citizenship', *Theory, Culture & Society*, 23(2–3), pp. 499–505. Available at: https://doi.org/10.1177/0263276406064831.

Ozkul, D. (2023) *Automating Immigration and Asylum: The Uses of new Technologies in Migration and Asylum Governance in Europe*. Oxford: Refugee Studies Centre, University of Oxford.

Pallister-Wilkins, P. (2017) 'Humanitarian Rescue/Sovereign Capture and the Policing of Possible Responses to Violent Borders', *Global Policy*, 8(S1), pp. 19–24. Available at: https://doi.org/10.1111/1758-5899.12401.

Panetta, F. *et al.* (2018) 'Guardian Virtual Reality: Songbird swoops in for last flight of our series', *The Guardian*, 31 July. Available at: https://www.theguardian.com/news/2018/jul/31/guardian-virtual-reality-songbird-swoops-in-for-last-flight-of-our-series (Accessed: 24 March 2023).

Papaevangelou, C. (2023) 'Funding Intermediaries: Google and Facebook's Strategy to Capture Journalism', *Digital Journalism*, pp. 1–22. Available at: https://doi.org/10.1080/21670811.2022.2155206.

Parater, L. (2015) ‘7 videos guaranteed to change the way you see refugees’, *UNHCR Innovation*, 26 June. Available at: https://www.unhcr.org/innovation/7-videos-guaranteed-to-change-the-way-you-see-refugees/ (Accessed: 26 April 2021).

Park, L.S.-H. and Pellow, D.N. (2004) ‘Racial Formation, Environmental Racism, and the Emergence of Silicon Valley’, *Ethnicities*, 4(3), pp. 403–424. Available at: https://doi.org/10.1177/1468796804045241.

Parker, B. (2019) ‘New UN deal with data mining firm Palantir raises protection concerns’, *The New Humanitarian*, 5 February. Available at: https://www.thenewhumanitarian.org/news/2019/02/05/un-palantir-deal-data-mining-protection-concerns-wfp (Accessed: 20 February 2023).

Parker, S. (2015) ‘“Unwanted invaders”: The representation of refugees and asylum seekers in the UK and Australian print media’, *eSharp*, 23. Available at: http://www.gla.ac.uk/media/media_404384_en.pdf (Accessed: 25 March 2020).

Partzsch, L. (2017) ‘Powerful Individuals in a Globalized World’, *Global Policy*, 8(1), pp. 5–13. Available at: https://doi.org/10.1111/1758-5899.12367.

Patel, P. (2022) ‘UK and Rwanda migration and economic development partnership’. Kigali, Rwanda, 14 April. Available at: https://www.gov.uk/government/speeches/home-secretarys-speech-on-uk-and-rwanda-migration-and-economic-development-partnership (Accessed: 30 March 2023).

Patrão, B., Pedro, S. and Menezes, P. (2015) ‘How to Deal with Motion Sickness in Virtual Reality’, in. *22nd Portuguese Meeting on Computer Graphics and Interaction*, The Eurographics Association, pp. 40–46. Available at: https://doi.org/10.2312/pt.20151201.

Pedwell, C. (2014) *Affective Relations: The Transnational Politics of Empathy*. London: Palgrave Macmillan Limited. Available at: https://ebookcentral.proquest.com/lib/UEA/detail.action?docID=1779981 (Accessed: 2 April 2020).

Pedwell, C. and Whitehead, A. (2012) ‘Affecting feminism: Questions of feeling in feminist theory’, *Feminist Theory*, 13(2), pp. 115–129.

de la Peña, N. *et al.* (2010) ‘Immersive Journalism: Immersive Virtual Reality for the First-Person Experience of News’, *Presence: Teleoperators and Virtual Environments*, 19(4), pp. 291–301. Available at: https://doi.org/10.1162/PRES_a_00005.

de la Peña, N. (2015a) ‘At Sundance, “Project Syria” Puts Viewers In Center Of Conflict’. Available at: https://www.npr.org/2015/01/26/381647459/at-sundance-project-syria-puts-viewers-in-center-of-conflict (Accessed: 14 June 2022).

de la Peña, N. (2015b) ‘The future of news? Virtual reality’, May. Available at: https://www.ted.com/talks/nonny_de_la_pena_the_future_of_news_virtual_reality (Accessed: 4 April 2020).

de la Peña, N. (2015c) ‘The Godmother of Virtual Reality: Nonny de la Peña’. Available at: https://www.engadget.com/2015-01-24-the-godmother-of-virtual-reality-nonny-de-la-pena.html (Accessed: 3 February 2021).

de la Peña, N. (2015d) ‘Virtual Reality, Empathy and the Next Journalism’. Available at: https://www.wired.com/brandlab/2015/11/nonny-de-la-pena-virtual-reality-empathy-and-the-next-journalism/ (Accessed: 28 April 2022).

de la Peña, N. (2015e) ‘“You Become a Witness”— Nonny de la Peña’s Immersive Journalism’. Available at: http://ochre.is/inspiration/you-become-a-witness-nonny-de-la-pena-immersive-journalism/ (Accessed: 14 April 2022).

de la Peña, N. (2018) ‘Towards behavioural realism: experiments in immersive journalism’, in J. Aston, S. Gaudenzi, and M. Rose (eds) *I-Docs: The Evolving Practices of Interactive Documentar*. Columbia University Press, pp. 206–221. Available at: https://doi.org/10.7312/asto18122-021.

de la Peña, N. (2019) ‘Nonny de la Peña, Emblematic: “It’s going to be up to us to educate people before they push that share button" | FEED’. Available at: https://feedmagazine.tv/interviews/nonny-de-la-pena-emblematic-its-going-to-be-up-to-us-to-educate-people-before-they-push-that-share-button/ (Accessed: 14 April 2022).

de la Peña, N. (2022) ‘Nonny de la Pena (Ep. 64)’. Available at: https://futureofstorytelling.org/story/nonny-de-la-pena-ep-64 (Accessed: 5 December 2022).

Perez, E.H. (no date) ‘Refugees – VR Documentary’. Available at: https://www.eduhernandez.com/project/refugees/ (Accessed: 2 July 2022).

Perrigo, B. (2023) *Exclusive: The $2 Per Hour Workers Who Made ChatGPT Safer*, *Time*. Available at: https://time.com/6247678/openai-chatgpt-kenya-workers/ (Accessed: 15 April 2023).

Picard, R.W. (1995) *Affective Computing*. No.321. MIT Media Laboratory, Perceptual Computing;

Pictet, J. (1979) *The Fundamental Principles of the Red Cross : commentary - ICRC*. Available at: /eng/resources/documents/misc/fundamental-principles-commentary-010179.htm (Accessed: 10 February 2020).

Pink, S. (2015) *Doing sensory ethnography*. 2nd edition. London ; Sage Publications. Available at: http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781473917040.

Polak, N. (2015) *Virtual Reality is geen film of game, maar een compleet nieuw medium*, *De Correspondent*. Available at: https://decorrespondent.nl/2500/virtual-reality-is-geen-film-of-game-maar-een-compleet-nieuw-medium/256300000-b5600736 (Accessed: 10 August 2022).

Porto, M.D. (2022) ‘Water Metaphors and Evaluation of Syrian Migration: The Flow of Refugees in the Spanish Press’, *Metaphor and Symbol*, 37(3), pp. 252–267. Available at: https://doi.org/10.1080/10926488.2021.1973871.

Potter, R. and Stonebridge, L. (2014) ‘Writing and rights’, *Critical Quarterly*, 56(4), pp. 1–16. Available at: https://doi.org/10.1111/criq.12157.

Power, M. (2007) ‘Digitized Virtuosity: Video War Games and Post-9/11 Cyber-Deterrence’, *Security Dialogue*, 38(2), pp. 271–288.

Psaropoulos, J. (2020) ‘A brief history of Moria’, *The Critic Magazine*, 29 December. Available at: https://thecritic.co.uk/a-brief-history-of-moria/ (Accessed: 2 July 2022).

PwC (2019) *Seeing is believing: How virtual reality and augmented reality are transforming business and the economy*.

Qasmiyeh, Y.M. (2020) ‘Writing the camp, writing the camp archive: The case of Baddawi refugee camp in Lebanon’, in E. Fiddian-Qasmiyeh (ed.) *Refuge in a Moving World*. UCL Press, pp. 52–73. Available at: https://doi.org/10.2307/j.ctv13xprtw.11.

Quijano, A. (2000) ‘Coloniality of Power, Eurocentrism, and Latin America’, *Nepantla: Views from the South*, 1(3), pp. 533–580.

Quijano, A. (2007) ‘Coloniality and Modernity/Rationality’, *Cultural Studies*, 21(2–3), pp. 168–178. Available at: https://doi.org/10.1080/09502380601164353.

Raia, A. (2015) ‘Of Refugees and Migrants: Stigma, Politics, and Boundary Work at the Borders of Europe’, *American Sociological Association Culture Section*, 14 September. Available at: https://asaculturesection.org/2015/09/14/of-refugees-and-migrants-stigma-politics-and-boundary-work-at-the-borders-of-europe/ (Accessed: 1 April 2020).

Rajaram, P.K. (2002) ‘Humanitarianism and Representations of the Refugee’, *Journal of Refugee Studies*, 15(3), pp. 247–264. Available at: https://doi.org/10.1093/jrs/15.3.247.

Rajaram, P.K. (2018) ‘Refugees as Surplus Population: Race, Migration and Capitalist Value Regimes’, *New Political Economy*, 23(5), pp. 627–639. Available at: https://doi.org/10.1080/13563467.2017.1417372.

Raty, T. and Shilhav, R. (2020) *The EU Trust Fund for Africa: Trapped between aid policy and migration politics*. Oxford, United Kingdom: Oxfam International.

Ray, A. (2021) ‘Remediation, virality and affect: a phenomenological reading into the Alan Kurdi Image’, *Continuum*, 35(1), pp. 99–110. Available at: https://doi.org/10.1080/10304312.2020.1852530.

Refugees (2015). Available at: https://www.youtube.com/watch?v=z9HEGHOk5hM (Accessed: 13 January 2022).

Reiser, D.B. (2009) ‘For-Profit Philanthropy’, *Fordham Law Review*, 77(5), p. 2437.

Reiser, D.B. (2020) ‘Disruptive Philanthropy: Chan-Zuckerberg, the Limited Liability Company, and the Millionaire Next Door’, *Florida Law Review*, 70(5), p. 921.

Richmond, A.H. (1993) ‘Reactive Migration: Sociological Perspectives On Refugee Movements’, *Journal of Refugee Studies*, 6(1), pp. 7–24. Available at: https://doi.org/10.1093/jrs/6.1.7.

Richter, F. (2022) *Infographic: Amazon Leads $180-Billion Cloud Market, Statista Infographics*. Available at: https://www.statista.com/chart/18819/worldwide-market-share-of-leading-cloud-infrastructure-service-providers/ (Accessed: 9 June 2022).

Robinson, N. (2012) ‘Videogames, Persuasion and the War on Terror: Escaping or

Embedding the Military—Entertainment Complex?', *Political Studies*, 60(3), pp. 504–522. Available at: https://doi.org/10.1111/j.1467-9248.2011.00923.x.

Robinson, W.I. and Harris, J. (2000) 'Towards a Global Ruling Class? Globalization and the Transnational Capitalist Class', *Science & Society*, 64(1), pp. 11–54.

Rodney, W. (2018) *How Europe Underdeveloped Africa*. Verso Books.

Rodríguez, E.G. (2018) 'The Coloniality of Migration and the "Refugee Crisis": On the Asylum-Migration Nexus, the Transatlantic White European Settler Colonialism-Migration and Racial Capitalism', *Refuge: Canada's Journal on Refugees*, 34(1), pp. 16–28. Available at: https://doi.org/10.7202/1050851ar.

Roquet, P. (2022) *The Immersive Enclosure: Virtual Reality in Japan*, *The Immersive Enclosure*. Columbia University Press. Available at: https://doi.org/10.7312/roqu20534.

Rorty, R. (1993) 'Human Rights, Rationality, and Sentimentality', in S. Shute and S. Hurley (eds) *On Human Rights: The Oxford Amnesty Lectures 1993*. New York: BasicBooks.

Rose, M. (2018) 'The immersive turn: hype and hope in the emergence of virtual reality as a nonfiction platform', *Studies in Documentary Film*, 12(2), pp. 132–149. Available at: https://doi.org/10.1080/17503280.2018.1496055.

Royal Air Force Families Federation (2020) 'RAF Regiment assists in developing virtual reality training platform > RAF Families Federation', *RAF Families Federation*, 13 August. Available at: https://www.raf-ff.org.uk/raf-regiment-vr-training-platform/ (Accessed: 11 May 2022).

Rubin, J. (2023) *Within Joins Meta*, *Meta*. Available at: https://www.oculus.com/blog/within-to-join-meta/ (Accessed: 17 March 2023).

Sabaratnam, M. (2020) 'Is IR Theory White? Racialised Subject-Positioning in Three Canonical Texts', *Millennium*, 49(1), pp. 3–31. Available at: https://doi.org/10.1177/0305829820971687.

Sajir, Z. and Aouragh, M. (2019) 'Solidarity, Social Media, and the "Refugee Crisis": Engagement Beyond Affect', *International Journal of Communication*, 13, pp. 550–577.

Salamon, G. (2018) *The Life and Death of Latisha King: A Critical Phenomenology of Transphobia*. New York: New York University Press.

Samsung (2021) *GBL Systems and Samsung Begin Deployment of 5G Testbeds for the U.S. Department of Defense | Samsung Business Global Networks*, *Samsung Global*. Available at: https://www.samsung.com/global/business/networks/insights/press-release/0713-gbl-systems-and-samsung-begin-deployment-of-5g-testbeds-for-the-us-department-of-defense/ (Accessed: 10 May 2022).

Samsung Newsroom (2016) *Samsung Supports UN World Humanitarian Summit with Virtual Reality Hub*. Available at: https://news.samsung.com/global/samsung-supports-un-world-humanitarian-summit-with-virtual-reality-hub (Accessed: 20 April 2022).

Saul, H. (2016) 'Syrian refugee competing in Rio saved 20 lives by swimming for three hours

pushing a sinking boat to safety', *The Independent*, 9 August. Available at: https://www.independent.co.uk/news/people/yusra-mardini-rio-2016-olympics-women-s-swimming-the-syrian-refugee-competing-in-the-olympics-who-saved-the-lives-of-17-people-by-jumping-into-open-water-and-pushing-their-sinking-boat-to-safety-a7173546.html (Accessed: 16 January 2023).

Schaub, M., Henck, A. and Baker, D.P. (2017) 'The Globalized "Whole Child": Cultural Understandings of Children and Childhood in Multilateral Aid Development Policy, 1946–2010', *Comparative Education Review*, 61(2), pp. 298–326. Available at: https://doi.org/10.1086/690811.

Schindler, P. (2018) 'The Google News Initiative: Building a stronger future for news', *Google*, 20 March. Available at: https://blog.google/outreach-initiatives/google-news-initiative/announcing-google-news-initiative/ (Accessed: 26 March 2023).

Schutte, N.S. and Stilinović, E.J. (2017) 'Facilitating empathy through virtual reality', *Motivation and Emotion*, 41(6), pp. 708–712. Available at: https://doi.org/10.1007/s11031-017-9641-7.

Schwab, K. (2023) *A Vision For A Global Collaboration Village*, *Forbes*. Available at: https://www.forbes.com/sites/worldeconomicforum/2023/01/17/a-vision-for-a-global-collaboration-village/ (Accessed: 16 February 2023).

Scopic (2016) *Awarded "Best European Independent Experimental Film"*, *Scopic*. Available at: https://scopic.nl/news/2016/4/12/awarded-best-european-independent-experimental-film (Accessed: 6 January 2023).

Scopic (no date a) *Duchenne*, *Scopic*. Available at: https://scopic.nl/duchenne-parent-project (Accessed: 10 August 2022).

Scopic (no date b) *Meet the Soldier*, *Scopic*. Available at: https://scopic.nl/meet-the-soldier (Accessed: 10 August 2022).

Scopic (no date c) *REFUGEES*, *Scopic*. Available at: https://scopic.nl/projects/refugees (Accessed: 25 February 2022).

Scott, M. (2014) 'Strategies of Humanitarian Communication: Choose Wisely', in *Media and Development: Development Matters*. London, United Kingdom: Bloomsbury Academic & Professional, pp. 138–166. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1696466.

Sea Prayer (2017). Available at: https://www.youtube.com/watch?v=LKBNEEY-c3s (Accessed: 20 October 2022).

Sealey-Huggins, L. (2017) '"1.5°C to stay alive": climate change, imperialism and justice for the Caribbean', *Third World Quarterly*, 38(11), pp. 2444–2463. Available at: https://doi.org/10.1080/01436597.2017.1368013.

Setrakian, L. (2014) *The Davos consensus on the Syrian crisis*, *World Economic Forum*. Available at: https://www.weforum.org/agenda/2014/01/davos-consensus-syrian-crisis/ (Accessed: 11 February 2023).

Shachar, A. (2009) *The Birthright Lottery : Citizenship and Global Inequality*. Cambridge, Massachusetts: Harvard University Press. Available at: https://eds.b.ebscohost.com/eds/ebookviewer/ebook/bmxlYmtfXzMyODkwN19fQU41?sid=9cca7f72-f389-4dd7-ad70-c7a7d970748b@pdc-v-sessmgr04&vid=0&format=EB&rid=2 (Accessed: 19 October 2019).

Shashkevich-Stanford, A. (2018) 'Virtual reality can make you more empathetic', *World Economic Forum*, 24 October. Available at: https://www.weforum.org/agenda/2018/10/virtual-reality-may-boost-empathy-more-than-other-media/ (Accessed: 19 October 2019).

Sheller, M. (2020) 'Mobilities and Displacement', in P. Adey et al. (eds) *The Handbook of Displacement*. Palgrave Macmillan, pp. 41–54. Available at: https://doi.org/10.1007/978-3-030-47178-1.

Sherman, N. (2022) 'Meta: Shares in Facebook owner dive 20% as investors lose faith', *BBC News*, 26 October. Available at: https://www.bbc.com/news/business-63406803 (Accessed: 19 January 2023).

Shilliam, R. (2018) *Race and the undeserving poor : from abolition to brexit /*. Agenda Publishing (Building Progressive Alternatives). Available at: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=cat07845a&AN=uea.1050954459&authtype=sso&custid=s8993828&site=eds-live&scope=site.

Shin, D. (2018) 'Empathy and embodied experience in virtual environment: To what extent can virtual reality stimulate empathy and embodied experience?', *Computers in Human Behavior*, 78, pp. 64–73. Available at: https://doi.org/10.1016/j.chb.2017.09.012.

SHOTPROS project (no date) *SHOTPROS, SHOTPROS*. Available at: http://shotpros.eu/ (Accessed: 17 February 2023).

Silverman, A.M. (2015) 'The Perils of Playing Blind: Problems with Blindness Simulation and a Better Way to Teach about Blindness', *Journal of Blindness Innovation and Research*, 5(2). Available at: http://dx.doi.org/10.5241/5-81.

Sirriyeh, A. (2018) *The Politics of Compassion: Immigration and Asylum Policy*. Bristol, UNITED KINGDOM: Bristol University Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5451347 (Accessed: 17 October 2019).

Smit, R., Heinrich, A. and Broersma, M. (2017) 'Witnessing in the new memory ecology: Memory construction of the Syrian conflict on YouTube', *New Media & Society*, 19(2), pp. 289–307. Available at: https://doi.org/10.1177/1461444815604618.

Smith, H. (2015) 'Shocking images of drowned Syrian boy show tragic plight of refugees', *The Guardian*, 2 September. Available at: https://www.theguardian.com/world/2015/sep/02/shocking-image-of-drowned-syrian-boy-shows-tragic-plight-of-refugees (Accessed: 11 October 2022).

Smith, H. (2022) 'Afghan refugee freed in Greece after two years of wrongful imprisonment', *The Guardian*, 10 December. Available at: https://www.theguardian.com/global-development/2022/dec/10/afghan-refugee-freed-in-greece-after-two-years-of-wrongful-

imprisonment (Accessed: 30 March 2023).

Sobchack, V. (2004) *Carnal Thoughts : Embodiment and Moving Image Culture*. Berkerley, United States: University of California Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=224220.

Sohlberg, J., Esaiasson, P. and Martinsson, J. (2019) 'The changing political impact of compassion-evoking pictures: the case of the drowned toddler Alan Kurdi', *Journal of Ethnic and Migration Studies*, 45(13), pp. 2275–2288. Available at: https://doi.org/10.1080/1369183X.2018.1538773.

Sontag, S. (2003) *Regarding the Pain of Others*. New York, United States: Picador.

Sophia, Z. (1992) 'Virtual corporeality: A feminist view', *Australian Feminist Studies*, 7(15), pp. 11–24. Available at: https://doi.org/10.1080/08164649.1992.9994641.

Southern, L. (2017) *The Guardian remains committed to VR, despite limited commercial opportunities*, *Digiday*. Available at: https://digiday.com/media/guardian-remains-committed-vr-despite-limited-commercial-opportunities/ (Accessed: 25 March 2023).

Spindler, W. (2015) *2015: The year of Europe's refugee crisis*, *UNHCR*. Available at: https://www.unhcr.org/news/stories/2015/12/56ec1ebde/2015-year-europes-refugee-crisis.html (Accessed: 24 January 2023).

Srnicek, N. (2016) *Platform Capitalism*. Oxford, United Kingdom: Polity Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=4773843.

Srnicek, N. and Williams, A. (2015) *Inventing the Future: Postcapitalism and a World Without Work*. London and New York: Verso Books.

Statista Research Department (2010) *Number of NGOs worldwide up to 2010, Statista*. Available at: https://www.statista.com/statistics/268357/changes-in-the-number-of-ngos-worldwide-since-1948/ (Accessed: 1 February 2023).

Stavinoha, L. (2021) *Frontex: An EU agency gone rogue?*, *EUobserver*. Available at: https://euobserver.com/opinion/153256 (Accessed: 19 May 2023).

Stavinoha, L. and Ramakrishnan, K. (2021) 'Approaching biographical life: Grassroots humanitarianism in Europe', in *Citizen Humanitarianism at European Borders*. Routledge, pp. 178–192.

Stewart, H. and Mason, R. (2016) 'Nigel Farage's anti-migrant poster reported to police', *The Guardian*, 16 June. Available at: https://www.theguardian.com/politics/2016/jun/16/nigel-farage-defends-ukip-breaking-point-poster-queue-of-migrants (Accessed: 6 February 2023).

Stone-Mediatore, S. (1998) 'Chandra Mohanty and the Revaluing of "Experience"', *Hypatia*, 13(2), pp. 116–133.

Strickland, P. (2016) *Why is the world afraid of young refugee men?* Available at: https://www.aljazeera.com/features/2016/6/20/why-is-the-world-afraid-of-young-refugee-men (Accessed: 31 July 2022).

Strom, K.J. (2021) ‘Learning from a “Lost Year”: An Autotheoretical Journey through Anxiety and Panic’, *Capacious: Journal for Emerging Affect Inquiry*, 2(3), pp. 2–24. Available at: https://doi.org/10.22387/CAP2020.47.

Stueber, K. (2020) ‘Empathy’, in H. LaFollette (ed.) *International Encyclopedia of Ethics*. Available at: https://doi.org/10.1002/9781444367072.wbiee736.pub2.

Sunderland, J. and Pezzani, L. (2022) ‘EU’s Drone Is Another Threat to Migrants and Refugees: Frontex Aerial Surveillance Facilitates Return to Abuse in Libya’, *Human Rights Watch*, 1 August. Available at: https://www.hrw.org/news/2022/08/01/eus-drone-another-threat-migrants-and-refugees (Accessed: 10 February 2023).

Suzuki, M. (2016) ‘Performing the human: refugees, the body, and the politics of universalism’, *Working Paper Series No.117, Refugee Studies Centre, University of Oxford* [Preprint].

Suzuki, M. (2022) ‘The limits of humanisation: “ideal” figures of the refugee and depoliticisation of displacement in virtual reality film Clouds Over Sidra’, *European Journal of Cultural Studies*, 25(5), pp. 1266–1285. Available at: https://doi.org/10.1177/13675494221076542.

Syrians for Truth & Justice (2018) *Syrian Citizenship Disappeared: How the 1962 Census Destroyed Stateless Kurds’ Lives and Identities*.

Taffel, S. (2021) ‘Data and oil: Metaphor, materiality and metabolic rifts’, *New Media & Society*, p. 14614448211017888. Available at: https://doi.org/10.1177/14614448211017887.

Tamale, S. (2020) *Decolonization and Afro-Feminism*. Ottawa, Canada: Daraja Press.

Tarnoff, B. (2017) ‘Empathy – the latest gadget Silicon Valley wants to sell you’, *The Guardian*, 25 October. Available at: http://www.theguardian.com/technology/2017/oct/25/empathy-virtual-reality-facebook-mark-zuckerberg-puerto-rico (Accessed: 17 February 2021).

Taylor, D. and Syal, R. (2021) ‘Priti Patel urged to justify claim that most boat migrants are not real refugees’, *The Guardian*, 2 November. Available at: https://www.theguardian.com/politics/2021/nov/02/priti-patel-urged-to-justify-claim-most-boat-migrants-not-real-refugees (Accessed: 10 March 2023).

Tazzioli, M. (2015) ‘The politics of counting and the scene of rescue: Border deaths in the Mediterranean’, *Radical Philosophy* [Preprint], (192). Available at: https://www.radicalphilosophy.com/commentary/the-politics-of-counting-and-the-scene-of-rescue (Accessed: 28 March 2023).

Tazzioli, M. (2022) ‘Extractive Humanitarianism: Participatory Confinement and Unpaid Labor in Refugees Governmentality’, *Communication, Culture and Critique*, 15(2), pp. 176–192. Available at: https://doi.org/10.1093/ccc/tcac018.

Tejel, J. (2019) ‘The Evolution of Kurdish Struggle in Syria: Between Pan-Kurdism and Syrianization, 1920-2016’, in M.M. Gunter (ed.) *Routledge Handbook of the Kurds*. Oxford and New York: Routledge, pp. 366–381.

The Academy of International Extended Reality (2021) 'The Grandfather of Virtual Reality and The Future of Mankind - Field of View with Tom Furness', *AIXR*, 29 July. Available at: https://aixr.org/insights/the-grandfather-of-virtual-reality-and-the-future-of-mankind-field-of-view-with-tom-furness/ (Accessed: 8 May 2022).

The British Army (2021) *Soldiers of Today Shaping the Army of Tomorrow*, *The British Army*. Available at: https://www.army.mod.uk/news-and-events/news/2021/05/virtual-reality-training-technology/ (Accessed: 11 May 2022).

The European Border and Coast Guard Agency (2022) *Frontex attended the SHOTPROS final conference*, *Frontex*. Available at: https://frontex.europa.eu/future-of-border-control/eu-research/news-and-events/frontex-attended-the-shotpros-final-conference-7PxmDy (Accessed: 17 February 2023).

'The Fundamental Principles of the International Red Cross and Red Crescent Movement' (2015). International Committee of the Red Cross. Available at: https://www.icrc.org/sites/default/files/topic/file_plus_list/4046-the_fundamental_principles_of_the_international_red_cross_and_red_crescent_movement.pdf.

The Guardian (2017a) 'Sea Prayer: a 360 story inspired by refugee Alan Kurdi', *The Guardian*, 1 September. Available at: https://www.theguardian.com/world/2017/sep/01/sea-prayer-a-360-story-inspired-by-refugee-alan-kurdi-khaled-hosseini (Accessed: 3 April 2020).

The Guardian (2017b) 'The Guardian launches Sea Prayer, a new virtual reality experience written by acclaimed author Khaled Hosseini', *The Guardian*, 1 September. Available at: https://www.theguardian.com/gnm-press-office/2017/sep/01/the-guardian-launches-sea-prayer-a-new-virtual-reality-experience-written-by-acclaimed-author-khaled-hosseini (Accessed: 10 August 2022).

The Guardian VR (no date) *Virtual reality by the Guardian*, *The Guardian*. Available at: http://www.theguardian.com/technology/ng-interactive/2016/nov/10/virtual-reality-by-the-guardian (Accessed: 14 February 2023).

The Insight Partners (2021) *Border Security Market Industry Growth, Industry Growth, Outlook By 2028*, *The Insight Partners*. Available at: https://www.theinsightpartners.com/reports/border-security-market (Accessed: 16 February 2023).

The Ministry of Defence and Andrew, S. (2019) *British Army tests innovative virtual reality training*, *GOV.UK*. Available at: https://www.gov.uk/government/news/british-army-tests-innovative-virtual-reality-training (Accessed: 11 May 2022).

The Transnational Institute (2019) *End the United Nations/World Economic Forum Partnership Agreement. | Transnational Institute*, *The Transnational Institute*. Available at: https://www.tni.org/en/article/end-the-united-nationsworld-economic-forum-partnership-agreement (Accessed: 19 March 2023).

Thompson, C. (2019) *Revolt at Microsoft over military contract*, *Washington Examiner*. Available at: https://www.washingtonexaminer.com/news/revolt-at-microsoft-over-military-contract (Accessed: 7 June 2022).

Ticktin, M. (2006) ‘Where Ethics and Politics Meet: The Violence of Humanitarianism in France’, *American Ethnologist*, 33(1), pp. 33–49.

Ticktin, M. (2011) *Casualties of Care: Immigration and the Politics of Humanitarianism in France*. University of California Press.

Ticktin, M. (2017) ‘A world without innocence’, *American Ethnologist*, 44(4), pp. 577–590. Available at: https://doi.org/10.1111/amet.12558.

Ticktin, M. (2020) ‘Innocence: Shaping the Concept and Practice of Humanity’, in M. Barnett (ed.) *Humanitarianism and Human Rights: A World of Differences?* Cambridge: Cambridge University Press (Human Rights in History), pp. 185–202. Available at: 10.1017/9781108872485.010.

Todd, Z. (2016) ‘An Indigenous Feminist’s Take On The Ontological Turn: “Ontology” Is Just Another Word For Colonialism’, *Journal of Historical Sociology*, 29(1), pp. 4–22. Available at: https://doi.org/10.1111/johs.12124.

Towns, A.R. (2020) ‘Toward a Black media philosophy’, *Cultural Studies*, 34(6), pp. 851–873. Available at: https://doi.org/10.1080/09502386.2020.1792524.

Towns, A.R. (2022) *On Black Media Philosophy*. Oakland, California: University of California Press (Environmental Communication, Power, and Culture).

Tracy, S.J. (2013) *Qualitative Research Methods : Collecting Evidence, Crafting Analysis, Communicating Impact*. Chicester, United Kingdom: John Wiley & Sons, Incorporated. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1120701.

Tran, Q., Jeridi, M. and Aguiling, M.L. (2021) *From digital promise to frontline practice: New and emerging technologies in humanitarian action*. United Nations Office for the Coordination for Humanitarian Affairs.

Trilling, D. (2018) *Lights In The Distance: Exile and Refuge at the Borders of Europe*. London: Picador.

Tudor, A. (2018) ‘Cross-fadings of racialisation and migratisation: the postcolonial turn in Western European gender and migration studies’, *Gender, Place & Culture*, 25(7), pp. 1057–1072. Available at: https://doi.org/10.1080/0966369X.2018.1441141.

Tuhiwai Smith, L. (2021) *Decolonizing Methodologies: Research and Indigenous Peoples*. Third edition. London: Zed Books. Available at: https://doi.org/10.5040/9781350225282.

Turner, J. (2020) *Bordering intimacy: Postcolonial governance and the policing of family*. Manchester, England: Manchester University Press. Available at: https://doi.org/10.7765/9781526146946.

Turner, L. (2019a) ‘Syrian refugee men as objects of humanitarian care’, *International Feminist Journal of Politics*, 21(4), pp. 595–616. Available at: https://doi.org/10.1080/14616742.2019.1641127.

Turner, L. (2019b) ‘The Politics of Labeling Refugee Men as “Vulnerable”’, *Social Politics: International Studies in Gender, State & Society* [Preprint]. Available at:

https://doi.org/10.1093/sp/jxz033.

Turton, D. (1996) ‘Migrants & Refugees’, in T. Allen (ed.) *In Search of Cool Ground: War, Flight & Homecoming in Northeast Africa*. London: United Nations Research Institute for Social Development, pp. 96–110.

Turton, D. (2003) ‘Conceptualising Forced Migration’, *Working Paper Series No.12, Refugee Studies Centre, Queen Elizabeth House, International Development Centre, University of Oxford* [Preprint].

Tyler, I. (2013) *Revolting Subjects: Social Abjection and Resistance in Neoliberal Britain*. London and New York: Zed Books. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=1160737.

UK Visas and Immigration (2020) *Factsheet: section 67 of the Immigration Act 2016 (‘Dubs amendment’)*, *GOV.UK*. Available at: https://www.gov.uk/government/publications/policy-statement-section-67-of-the-immigration-act-2016/factsheet-section-67-of-the-immigration-act-2016 (Accessed: 9 December 2022).

UNHCR (2019) *Handbook on Procedures and Criteria for Determining Refugee Status and Guidelines on International Protection*. Geneva.

United Nations (1948) *Universal Declaration of Human Rights*, *United Nations*. United Nations. Available at: https://www.un.org/en/about-us/universal-declaration-of-human-rights (Accessed: 24 January 2023).

United Nations (2016) *FEATURE: UN uses virtual reality to inspire humanitarian empathy*, *UN News*. Available at: https://news.un.org/en/story/2016/05/529752-feature-un-uses-virtual-reality-inspire-humanitarian-empathy (Accessed: 21 April 2022).

United Nations High Commissioner for Refugees (1951) *Convention and Protocol Relating to the Status of Refugees*.

United Nations High Commissioner for Refugees (2016a) *Europe Refugees & Migrants Emergency Reponse: Gender Breakdown of Arrivals to Greece and Italy*.

United Nations High Commissioner for Refugees (2016b) *Global Trends: Forced Displacement in 2015*. Available at: https://www.unhcr.org/576408cd7.pdf (Accessed: 25 April 2022).

United Nations High Commissioner for Refugees (2017) *Sea Prayer*, *UNHCR*. Available at: https://www.unhcr.org/sea-prayer.html (Accessed: 10 October 2022).

United Nations High Commissioner for Refugees (2022) *Global Trends: Forced Displacement 2021*. Copenhagen, Denmark.

United Nations High Commissioner for Refugees Türkiye (no date) *Temporary protection in Türkiye*, *UNHCR Türkiye*. Available at: https://help.unhcr.org/turkiye/information-for-syrians/temporary-protection-in-turkey/ (Accessed: 20 October 2022).

United Nations High Commissioner for Refugees UK (no date) *Teaching about Refugees*, *UNHCR*. Available at: https://www.unhcr.org/teaching-about-refugees.html (Accessed: 25

June 2022).

United Nations High Commissioner for RefugeesRefugees (2017) *Searching for Syria? Google and UNHCR offer answers to five top questions*, *UNHCR*. Available at: https://www.unhcr.org/news/press/2017/5/5921922c4/searching-syria-google-unhcr-offer-answers-five-top-questions.html (Accessed: 30 March 2023).

United Nations Office for the Coordination of Humanitarian Affairs (2022) *Humanitarian Needs Overview: Syrian Arab Republic*.

United Nations Virtual Reality (no datea) *About – UN Virtual Reality, United Nations Sustainable Development Goals Action Campaign*. Available at: http://unvr.sdgactioncampaign.org/home/about/#.Xn_K827grOQ (Accessed: 28 March 2020).

United Nations Virtual Reality (no date b) 'VR Films – UN Virtual Reality'. Available at: http://unvr.sdgactioncampaign.org/vr-films/ (Accessed: 14 February 2023).

University of Twente and ScopicLabs (no date) *VR-Surveillance, VR-Surveillance*. Available at: https://vr-surveillance.com (Accessed: 10 August 2022).

U.S. Department of Defense (2020) *DOD Announces $600 Million for 5G Experimentation and Testing at Five Installations*, *U.S. Department of Defense*. Available at: https://www.defense.gov/News/Releases/Release/Article/2376743/dod-announces-600-million-for-5g-experimentation-and-testing-at-five-installati/ (Accessed: 10 May 2022).

Vacchelli, E. (2018) *Embodied Research in Migration Studies: Using Creative and Participatory Approaches*. Bristol, UNITED KINGDOM: Policy Press. Available at: http://ebookcentral.proquest.com/lib/uea/detail.action?docID=5451355.

Vardi, A. (2019) *With virtual reality, Israeli soldiers train in simulated terror tunnels*. Available at: https://www.timesofisrael.com/with-virtual-reality-israeli-soldiers-train-in-simulated-terror-tunnels/ (Accessed: 11 May 2022).

Verma, S. (2015) *A new way to see and share your world with 360-degree video, blog.youtube*. Available at: https://blog.youtube/news-and-events/a-new-way-to-see-and-share-your-world/ (Accessed: 6 January 2023).

Virtual Realities: Immersive Documentary Encounters (n.d.) *VR Nonfiction: A Mediography, A History of Virtual Reality Nonfiction 2012-2018*. Available at: http://vrdocumentaryencounters.co.uk/vrmediography/ (Accessed: 20 October 2021).

Virtual Reality: Creating Humanitarian Empathy (2016). Available at: https://www.youtube.com/watch?v=vAEjX9S8o2k (Accessed: 3 April 2020).

Visualise (no date) *Forced From Home*, *Visualise*. Available at: https://visualise.com/case-study/msf-doctors-without-borders-forced-home (Accessed: 16 February 2023).

Voynar, K. (2016) 'Chris Milk Talks Empathy in VR, the Commerce of Art and Waiting for The Holodeck', *IndieWire*, 2 February. Available at: https://www.indiewire.com/2016/02/chris-milk-talks-empathy-in-vr-the-commerce-of-art-and-waiting-for-the-holodeck-28353/ (Accessed: 22 March 2020).

Walcott, R. (2021) *The Long Emancipation: Moving toward Black Freedom*. Durham and London: Duke University Press.

Walia, H. (2013) *Undoing Border Imperialism*. California, US: AK Press.

Walia, H. (2021) *Border and Rule*. Chicago, United States: Haymarket Books.

Wang, J. (2018) 'Against Innocence: Race, Gender, and the Politics of Safety', in *Carceral Capitalism*. California: Semiotext(e) (Semiotext(e) intervention series, 21), pp. 260–295.

Watson, Z. (2017) *VR for News: The New Reality?* Oxford: Reuters Institute for the Study of Journalism, University of Oxford, pp. 1–48.

Webber, F. (2017) 'The legal framework: when law and morality collide', in *Humanitarianism: the unacceptable face of solidarity*. London, United Kingdom: The Institute of Race Relations, pp. 7–21.

Weheliye, A.G. (2014) *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. USA: Duke University Press.

Weiwei, A. (2018) 'The refugee crisis isn't about refugees. It's about us | Ai Weiwei', *The Guardian*, 2 February. Available at: https://www.theguardian.com/commentisfree/2018/feb/02/refugee-crisis-human-flow-ai-weiwei-china (Accessed: 6 January 2020).

Wherry, A. (2015) 'Forced migration in the "First World": Questioning the logics of a humanitarian concept', *Working Paper Series No.110, Refugee Studies Centre, Oxford Department of International Development, University of Oxford* [Preprint].

White, B.T. (2019) *Talk of an 'unprecedented' number of refugees is wrong – and dangerous, The New Humanitarian*. Available at: https://www.thenewhumanitarian.org/opinion/2019/10/03/unprecedented-number-refugees-wrong-dangerous (Accessed: 19 February 2020).

'Why the BBC uses the word "migrant"' (2015) *BBC World Service*. Available at: https://www.bbc.co.uk/programmes/p030bn5m (Accessed: 31 March 2020).

Whyte, J. (2003) 'We Are Human Beings: the Woomera breakout', in. London and New York: Verso Books, pp. 430–436.

World Economic Forum (2022) *Annual Report 2021-2022*. Geneva, Switzerland.

World Economic Forum (no date a) 'Charter for Foundation Members'.

World Economic Forum (no date b) *Defining and Building the Metaverse*. Available at: https://initiatives.weforum.org/defining-and-building-the-metaverse/home (Accessed: 13 February 2023).

World Economic Forum (no date c) *Our Mission, World Economic Forum*. Available at: https://www.weforum.org/about/world-economic-forum/ (Accessed: 19 January 2023).

World Economic Forum and United Nations (2019) 'The United Nations -World Economic

Forum Strategic Partnership Framework for the 2030 Agenda'.

World Vision (no date) *Stories After Syria, World Vision*. Available at: https://www.wvi.org/stories-after-syria (Accessed: 16 February 2023).

Wynter, S. (2003) 'Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An Argument', *CR: The New Centennial Review*, 3(3), pp. 257–337. Available at: https://doi.org/10.1353/ncr.2004.0015.

Yao, X. (2021) 'Positionality as Pedagogy: East Asian Comparative Racialization Between North America and the UK'. *Chase Decolonise Network*, Entangled Exchanges: Decolonising the Classroom workshop, 6 May.

Yildiz, K. (2005) *The Kurds in Syria : The Forgotten People*. London: Pluto Press. Available at: https://search.ebscohost.com/login.aspx?direct=true&db=e000xww&AN=168059&site=ehost-live.

Zetter, R. (1991) 'Labelling Refugees: Forming and Transforming a Bureaucratic Identity', *Journal of Refugee Studies*, 4(1), pp. 39–62. Available at: https://doi.org/10.1093/jrs/4.1.39.

Zuboff, S. (2019) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.

Zuckerberg, M. (2021) 'Mark Zuckerberg is betting Facebook's future on the metaverse'. Available at: https://www.theverge.com/22588022/mark-zuckerberg-facebook-ceo-metaverse-interview (Accessed: 18 April 2022).