Original Study

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Online Tribes and Digital Authority: What Can Social Theory Bring to Digital Archaeology?

Abstract: From early discussions of the disruptive potential of computer technologies for archaeological applications, to the present era of digital archaeology as the technical underpinning of modern archaeological practice, we have continued to debate the potential impacts of digital communication and digital capture and storage on our knowledge, profession and communications. The increased use of digital tools and methods for archaeological research and dissemination, as well as what Roosevelt (2015) has referred to as the shift to the digital paradigm within archaeological practice, leads us to suggest that the impact of this paradigm shift requires careful and critical examination. This article will examine the edges of the disciplines of archaeology and sociology, where we aim to advance our understanding of the relationship between digital technologies and archaeological knowledge from a uniquely social perspective, using the theoretical approaches of both classic and modern sociologists. The application of this lens of sociology to digital archaeology equips us to understand how archaeology and archaeological practice is situated in a social world, which is especially relevant in the Global West, where digital technology is ubiquitous. Through a critical consideration of the complexity of use of digital technologies within digital archaeology, we can begin to shift our focus away from the character and method of tools and workflow, to the background of intellectual power and influence.

Keywords: sociology, digital archaeology, social media, theory, archaeological practice

1 Archaeology and the Social Lens

Archaeology as a discipline has absorbed and repurposed the works of sociological theorists for decades (Johnson 1999; Lumbreras 2005; Trigger 2006). After all, archaeology is not just about the scientific approaches to understanding human activities and the material culture of the past – it also produces, interprets, and values archaeological knowledge through a variety of socially- and politically-situated activities in the present. The production and analysis of archaeological knowledge about the past is situated within a complex and evolving set of geographic, economic, ethical, policy, political, and social structures and strictures, which govern the ability of professional and amateur archaeologists to examine, stratigraphically excavate, sample, process, and reconstruct raw archaeological material from trench to museum archive. The existence of this knowledge within and beyond the digital realm, and its communication and repurposing through digital means, is equally subject to fluctuating political, cultural, social, and economic perspectives.

Yet, this absorption has not been without criticism, especially given the perception of an increasing distance between archaeological theory and archaeology practice. Murray writes that many post-processual

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archaeologists have produced work mashed together from the "ill-digested browsings of the literature of the sociology of science and some (even for archaeology) extraordinarily incoherent discussions of realist, relativist, and 'indigenised' epistemologies" (Murray 2014: 83). However, as Balme and Bulbeck note, "research which suggests that the most radical advances are made, not within the 'self-contained boundaries of professional elites" (Thorne 2006: 476), but at the borderlands between disciplines which are more open to the challenges from outsiders (Balme and Bulbeck 2008: 4; Conkey 2005; Ray 2006: 462–463; Thorne 2006: 477). Although the history of interactions between these disciplines is perhaps too complex to outline within the boundaries of this paper, it is here at the intersection of archaeology and sociology where we are most likely to radically advance our understanding of the relationship between digital technologies and archaeological knowledge from a uniquely social perspective. With this perspective, we can question how, where, when, and, most importantly, why we use digital technologies within the discipline as vehicles for communications and scholarship, as well as for enjoyment.

Using the framework provided by Lupton's (2014) work to define the subject of digital sociology, this paper will first highlight areas of research within the discipline of archaeology that one can argue pursue a specifically digital sociology approach to digital archaeology. Secondly, this paper will provide an overview of those sociological perspectives most relevant for understanding how digital archaeology is situated socially, as well as for considering its relationships with digital media formats, functions, and structures. Thirdly, the paper will briefly examine the subject of authority and expertise, addressing ways in which archaeology may benefit from a sociological understanding of these issues and their impact on current thinking about theoretical and practical approaches to digital archaeology and communications. This discussion will help to highlight current areas of sociological influence in the discipline. Finally, this article will suggest future directions for professional practice, digital communications, and public engagement, thus enabling a better understanding of user experiences, and, perhaps most importantly, providing food for thought with which to explore deeper critical social approaches to digital archaeology.

2 Digital Archaeology

The term 'digital archaeology' has a number of different meanings and contexts, including the recovery of data from obsolete formats, the exploration of the historical development of digital culture and technologies, and archaeological informatics. For the purposes of this article, we will restrict ourselves to instances where digital archaeology refers to activities undertaken within the archaeological sector, and where this work deals with the issues surrounding the use of digital technologies to capture, examine, visualise, and curate specifically archaeological data, as well as to communicate archaeological information through the use of digital media and technologies.

The application of digital technologies and digital methods with which to analyse archaeological data, and data about archaeology as a professional discipline, is by no means a new phenomenon. Archaeological computing, digital archaeology, and digital public archaeology have a history that reaches back several decades (see: Denning 2004; Huggett 2012; Huggett and Ross 2004). The growth of digital techniques and communications within archaeology is a response to changes within the communications landscape more generally, and to a perceived need for efficient solutions within a discipline subject to commercial pressures and budget limitations, in addition to the existing demands of STEM-focussed academia (Gordon et al. 2016: 3).

Often seen as an area involved solely in technical applications and data analysis, or simple, ephemeral communications, in the case of social media, the social contexts of digital platforms and technologies involved in digital archaeology have been under-explored and under-critiqued, and this has, as Huggett (2015b: 87) argues, 'left archaeologists open to accusations of technological fetishism'. To counteract this perception, this paper, based on a presentation at the Computer Applications in Archaeology Conference in Oslo, April 2016, will explore some examples of theoretical approaches that sociologists can bring to understanding the digital turn within the archaeological profession, and examine the contributions that an understanding of sociology could offer the often 'magpie' discipline of digital archaeology. Huggett (2015: 89)

has called for "a form of introspective or more self-aware Digital Archaeology, one which consciously seeks to understand the underlying processes and behaviours that sit behind the tools, technologies, and methodologies applied". To answer this call, this paper will discuss classic as well as modern sociological theories, which can be brought to bear on the interactions and social dimensions of the use of digital media in communications between professional archaeologists and the non-professional, and attempt to lend digital archaeology some of this critical and social introspection.

Contributions such as the modern classic sociological work of Pierre Bourdieu (1990) on the logic of practice, as well as more recent theoretical contributions such as Mathieu O'Neil's (2009) repurposing of Max Weber's classic theory of power and authority (Weber 1978), can in fact prove to be vital to our understanding of the potential reproduction of inequalities, of processes surrounding the public display of expert knowledge, and of the entanglement of social communication networks in the variety of digital environments used or provided by archaeological organisations.

3 Bringing Sociology and Digital Archaeology Together

The many forms of digital media formats and platforms now available for discussion and consumption have become *the* arena for public reception, perception, and discussion of archaeological topics, from the 3D reconstruction of the skeleton and burial of Richard III (Buckley et al. 2013) or 'reconstruction' in digital form of Syrian antiquities destroyed by ISIL (Fangi et al. 2013; Williams 2015), to the appropriate use of games and applications such as Pokemon Go in museums and at archaeological sites (Bade 2016; Cascalheira 2014). These are the locations where archaeology as a professional, scientific, and *relevant* discipline is encountered, discussed, and legitimised in the eyes of the general public.

In this light, it is useful here to outline the work of sociologist and digital researcher Deborah Lupton. Lupton has developed a four-fold typology of digital sociology (2014), and the use of her work as a lens, while not an exhaustive approach, provides an overview of the areas of archaeological theory and practice to which a sociological approach could be better applied, highlighting existing archaeological literature. Lupton's first typological area of digital sociological scholarship, which can be applied to archaeological practise, is an understanding of the location, methods, and activities that constitute professional digital practice. For the archaeologist, we can examine the concept of digital public engagement – for instance, those methods used for the collection, analysis, curation, and sharing of archaeological data and content, the use of digital technologies at professional events and conferences (i.e. live tweeting [Richardson 2012; Richardson 2015; Ross et al. 2010], streaming, and blogging [Austin 2014]), academic instruction using digital technologies (Brock and Goldstein 2015), public engagement using digital forms of outreach, and the broadcast of digital content on numerous internet and mobile platforms (Bonacchi 2012; Perry 2015; Richardson 2013).

We can explore the use of technologies, by examining practise-based phenomena, such as digital innovation and the enthusiastic or reluctant adoption of new forms of data capture, processing, and dissemination. Through this approach, with the lens of social distinction, we can observe the creation of digital archaeology-based niches, the communicative practises of cliques, and professional identity signalling. Understanding the presentation of the professional self within digital archaeology can also encompass examining how archaeologists network online with other professionals within the discipline. We can explore boundary work and issues of expertise, and authority, as well as the growing issues of digital post-truth archaeology found in the natural movement of pseudo-archaeology topics online. When exploring the question of expertise through the sociological lens, we can better determine if traditional expertise is seen as obsolete in the era of crowdsourced knowledge, and how digital community archaeology, co-production, public engagement, and participatory technologies will affect the future of professional practise. We can discuss issues that impact on public engagement with knowledge outputs, as well as issues such as Open Access and the publication of papers outside of journals, books, and academic paywalls. We can explore ways in which internet technologies have impacted the presentation of academic work to the public (Holtorf 2004), and the use of Massive Open Online Courses for archaeological pedagogy and public

engagement (Alcock et al. 2016). We can also explore more recent technological innovations that impact digital professional practice and have the power to disrupt or diverge professional practice, such as the use of online GIS, photogrammetry and 3D -image capture, which can be accessed by anyone with an internet connection, and no longer require expensive software and licensing.

Lupton's second type of digital sociology is directly related to the advent of digital public archaeology as a popular practice. This area of digital archaeology can encapsulate the broader personal, cultural, and structural changes involved in the digital turn within archaeology, and its relationship with people outside the discipline (McDavid 2004; Richardson 2015; Walker 2014b). For example, areas of study that use this sociological approach can include digital inequalities (Richardson 2014; Perry and Beale 2015) and their impact on access to archaeological content (Perry et al. 2015), the actions and activity of users online (Richardson 2014; 2015), the organization of online activism (Richardson 2014a), dark digital heritage (Morgan and Pallascio 2015), and issues with archiving and perpetuating digital data (Jeffrey 2012; Law and Morgan 2014).

Lupton's third 'type' of digital sociology concerns itself with the use of large data sets to conduct social research. This area can include analysis of data that is quite common in other disciplines such as computer and information sciences, including distant reading, social network analysis, or web scraping. There have been few examples to date of this kind of research undertaken in the field of digital archaeology, with notable examples from Graham (Graham et al. 2012; Graham 2015), Kintigh (2015), and Marwick (2013). The use of these types of qualitative and quantitative analysis techniques is increasing, especially under the influence of the fluid methodological boundaries between archaeology and other areas of the digital humanities and social sciences. Future outputs from the work of the authors in the Digital Social Studies Unit at Umeå University, and of Higgley, Bonacchi and Yarrow at University College London and Durham University (2017) will add to this emerging body of literature.

Lupton's fourth and final area for study is the critical understanding of the data produced in digital work and the roles of the actors in digital communications can provoke and challenge the discipline, while also creating new forms of knowledge and power relationships through digital media. Lupton underlines the importance of directing critical attention to the ways in which digital media, technologies, and metrics are used in academic practice. The use of these media leads to the configuration of new forms of subject positions and assemblages, and there is a need to reflect further upon the consequences of these transformations.

4 Digital Archaeology as a Field of Social Practice

The increased use of digital tools and methods for archaeological research and dissemination, as well as what Roosevelt (2015: 339) has referred to as the "shift to the digital paradigm" within archaeological practice, suggests that the impact of this 'paradigm shift' will require careful examination – after all, the practice of analogue archaeology is still prevalent, alongside digital archaeologies. The ambitious statement that "we are all digital archaeologists" (Morgan and Eve 2012: 523) begs for clarification of exactly who this "we" might be, given concerns of differing access to digital tools, education, financing and infrastructure, the use of proprietary software and platforms, the efforts of community archaeology projects that struggle to understand and engage with digital communications, and low-paid, short-term contracts for fieldwork assistants who may be lucky if they get to wield a digital camera on site (see: Kansa 2016; Caraher 2016: 425). There are a variety of areas for further study of social behaviour within digital archaeology: the practice of archaeology itself using these technologies; which research methods should be used and their conceptualisation; the ways in which these technologies have become measured, valued and normalised by their users; the contribution of these practices to the formation of power structures; and their contribution to the wider knowledge economy, including subsequent implications for specialist knowledge within the power structures of an increasingly neoliberal Western university system and professional regulated workforce. We can explore data reliability within the context of data curation, the creation of data storage standards, and dissemination strategies, thus attempting to

understand epistemological issues determining the reliability and availability of data, from a variety of perspectives within and beyond the discipline.

It is possible to examine interactions between users and digital devices, and explore the relationships of these technologies with political and social structures (particularly within the context of archaeology and heritage), examine the power relationships within these interactions, and begin to explore disruptions and divergence from the norm within these relationships and institutions. Mediatisation has impacted communication flows in wider society, amongst institutions, and between institutions and individuals – as digital media infiltrates everyday life, actors have to adapt their behaviour to accommodate the media's valuations, formats, and routines (McLuhan 1964). When considering practices within digital archaeology, it is important not to see the communicative technologies used as mere, transparent tools, and overlook the social and power relationships, as well as political implications, that are also invoked in their use. We need to remember that whilst in many Western nations digital culture has saturated the population, in many developing countries this proliferation has not occurred. Even within our own Western societies, the use of digital technologies, and participatory culture is "unevenly distributed" (Costa 2013: 2) and may not be open to equal access and interaction. Contextualising and understanding the practical use of these tools is essential, within a wider process of societal and academic change, as well as within the development of social spaces in which the ownership, production, interpretation, and dissemination of archaeological knowledge takes place.

For the purposes of this article, it is useful to reflect here on Bourdieu's perspective on social practice, which is focused on the ways in which intentions, predispositions, history, and materiality intersect in practice within social spaces. When defining the very discipline of sociology as a science of the social world, Bourdieu (1985: 723–724) writes:

> Initially, sociology presents itself as a *social topology*. Thus, the social world can be represented as a space (with several dimensions) constructed on the basis of principles of differentiation or distribution constituted by the set of properties active within the social universe in question, i.e., capable of conferring strength, power within that universe... Agents and groups of agents are thus defined by their relative positions within that space. Each of them is assigned to a position or a precise class of neighboring positions (i.e., a particular region in this space) and one cannot really – even if one can in thought – occupy two opposite regions of the space... [O]ne can also describe it as a field of forces, i.e., as a set of objective power relations that impose themselves on all who enter the field and that are irreducible to the intentions of the individual agents or even to the direct interactions among the agents.

Digital archaeology can indeed be analysed as being such a social 'field of forces'. When considering the complexity of use of digital technologies within digital archaeology – for example, for data capture, analysis and visualisation – one can begin to shift focus away from the character and method of tools and workflow, to issues such as the background of intellectual power and influence, specialisation in the project management process leading to fragmented work practises, data recording and communication techniques that may marginalise the non-specialist, and the veracity and intrinsic privilege of the concept of a "slow archaeology" digital ideal (Caraher 2016). These practices in digital scholarship are deeply linked to the forms of capital that Bourdieu (1985, 1986) identifies: social capital or the network and relationships constructed by the individual scholar; cultural capital, in terms of qualifications, institutional affiliations, material assets (such as software and hardware), dispositions, and values; economic capital, in terms of financial support, funding and ability to acquire grants; and finally, symbolic capital, in terms of prestige and reputation, which can translate into, and emerge from, the preceding forms of capital in a Bourdeisian sense.

The key point in Bourdieu's work, most relevant in the context of this discussion, is that the spaces of creation, communication, and knowledge exchange, which are constituted as archaeology becomes more intrinsically 'digital', are situated in a wider and multidimensional social space (i.e., 'society'). In this space, archaeologists of all kinds, digital or otherwise, and the general public beyond the profession, assume positions in relation to each other, as well as to other spatialities (ranging from other academic disciplines, to other modes of communication such as, for example, news reporting), on the basis of power relations – that is, "the socioeconomic factors that condition our use of digital tools, and the fundamental relationships of inequality and dependency that they create" (Rabinowitz 2016: 511).

In other words, perspectives such as these described here can bring to digital archaeology a way of seeing and understanding these relationships of power, dominance, and inequality, prompting much-needed social introspection and a critical, reflexive approach to digital archaeology.

Using the example of communicative and dissemination practices in archaeology, what has been termed digital public archaeology (Richardson 2013) is an interesting example with which to explore hierarchical fields of practice. Individuals and groups populating and constructing the communicative spaces of digital archaeology are identifiable to each other by their relative positions within these spaces; the spaces as such are positioned in relation to other spaces. Archaeological experts, as well as archaeology students, amateur archaeologists, and those involved in community archaeology projects, are parts of these hierarchical fields of forces on different levels. While these agents are free to act and interact in many respects, they are also restricted by powers that are irreducible to individual agents or interactions. For example, an individual participant in a community archaeology project may post a photograph of their day's work alongside an interpretive caption on the Facebook page of their community archaeology group, but he or she must still submit to the *rules* of the social field of this forum, as well as the hierarchies of expertise within the project itself. There also remains a hierarchical order in the wider force field of digital public archaeology content, where the work and interpretation of the professional archaeologist shared and captioned by an archaeological organisation or affiliated individual professional will have higher 'status' than other content posted elsewhere, and this order is directly related to the concept of capital outlined above. As previous research by Richardson (2014) has shown, this hierarchical order is robustly defended within what are essentially "stage-managed spaces of engagement" (Stilgoe et al. 2014: 7). A professionally affiliated archaeologist may tweet, blog, or capture and subsequently curate 3D material in the public realm, for example, but his or her semiotic actions will still be judged in relation to the *doxa* of the archaeological field, digital or not. As defined by Bourdieu (1984: 471), doxa refers to the underlying rules of structured social settings – "an adherence to relations of order which…are accepted as self-evident". Digital archaeology will in turn be judged on the basis of its *symbolic resources* in the wider social field of society/academia/the humanities/the heritage sector and so on.

These three notions of rules, doxa, and symbolic resources, brought to the fore in the previous paragraph, are key to Bourdieu's theory of practice. What he tries to do with this conceptual system is to get beyond the long-standing sociological debate about structure versus agency. Can people act freely, or do predefined social scripts and structures restrain them? This argument has many similarities to the debate that continues to take place about the power of digital media to transform the nature of public involvement with archaeology, as well as to encourage co-production and non-professional involvement in online archaeology activities and discussions. From early discussions of the disruptive potential of computer technologies for archaeological applications (Ucko 1992) to the present era of digital archaeology as the "technical underpinning of modern archaeological practice" (Huggett 2015a: 80) archaeologists have continued to debate the potential impacts, on knowledge, the profession, and on our communications, of digital communication, capture, and storage.

While many of the more optimistic perspectives put free individuals, saturated with agency, at the centre of such discourse (Morgan and Eve 2013), the more critical standpoints tend to be based on the premise that the present structural arrangements of capitalism and market-led archaeological practice, which dictate the form and means of archaeological work undertaken in most countries of the Global West, and, by extension, their digital archaeologies as well (Kansa 2016; Rabinowitz 2016) have an effect on the types and locations of digital work that can be done, the modes in which digital communications on archaeological subjects can take place, and the long term sustainability of digital archaeology in general. Bourdieu emphasises that: "The experience of the world that is taken for granted presupposes the agreement between the dispositions of the agents and the expectations or demands in a world in which they are inserted" (2000: 147).

Bourdieu attempts to overcome the duality of structure versus agency by introducing the idea of the *habitus* – the package of dispositions that is deposited in the individual and that guides his or her interactions with others, or, for that matter, the predisposition of a social space in itself. His work here is important for the understanding of critical approaches to changing social practices and actions within the discipline of digital archaeology. Bourdieu saw habitus as a set of internalised behaviours, which have

developed though time, and provided the process through which individuals think, act, and approach their surroundings, including within the field in which individuals work. The individual habitus is therefore a source of dispositions and strategies that are also a "generative principle of regulated improvisations" (Bourdieu 1977: 78) that "functions at every moment as a matrix of perceptions, appreciations, and actions" (Bourdieu 1977: 83). Habitus must be studied through a focus on practice, because it appears only in "the whole art of performance" (Bourdieu 1977: 20). It is "constituted in practice and is always oriented towards practical functions" (Bourdieu 1990: 52).

5 Sociology and the Concept of Digital Authority

Online communications researcher Mathieu O'Neil (2009) is among those who advocate a critical perspective on digital sociality, and he argues that *authority* is a hugely important element of the social interaction in digital online networks. Firstly, he argues, in order to be able to organise and express themselves, participants in any form of digital interaction need to exercise some sort of quality control over what they are doing and who is doing what. Otherwise, he says, it will all turn into "an incoherent Babel" (O'Neil 2009: 1). He agrees, in other words, that organisation, and the organisation of communications, is impossible without some sort of hierarchy emerging.

Secondly, in relation to the issue of trust and reliability, it is O'Neil's view that for online communication and organisation to work, participants also need to be able to somehow determine who is a reliable source of information, and who is not, and which participant's contributions are relevant and important and which are misleading or ill informed. Thirdly, he argues, the development of digital trust will in turn decide who should be part of the group, since issues of group identity, inclusion, and exclusion need to be dealt with somehow. O'Neil's explanation of how authority emerges online, despite the apparently 'stateless' character of the internet, lies in his notion of 'online tribes'. He defines such tribes as "social formations which favour grassroots direct democracy, the pleasurable provision of free gifts, and the feeling of proximity to others" (O'Neil 2009: 2). However, for reasons presented above, authority is still an important dimension of such tribes.

O'Neil draws here on the classic sociology of Max Weber (1978), whose view was that authority is a fundamental feature of all complex systems of human relationships – which will inevitably also include the internet. In Weber's view, the authority of a person is the direct result of other people agreeing that this person has a legitimate right to exercise power. The point made by O'Neil is that it is wrong to assume that just because the internet has a somewhat horizontal structure that may encourage many-to-many communication, it abolishes the concept of authority. Rather, he says, new forms of power and domination have arisen online.

So, in digital settings, one will find groups that might seem at first glance to be anti-authoritarian, but which upon closer inspection are in fact rather strictly governed. There is an interesting contradiction here between the dual requirements of an environment wanting to remain completely open, non-bureaucratic, and without hierarchies, but which at the same time needs some sort of system for achieving what it wants. For example, Wikipedia is a peer-production project which is focused on anyone's opportunity to contribute, and seems to reject all forms of traditional bureaucracy. But, as O'Neil (2009: 172) explains, "in reality, Wikipedia is clearly rules-based; it keeps written records of every possible transaction; and it is meritocratic...in the old-fashioned way: through the recognition of effort. All these traits correspond to the bureaucratic model" (O'Neil 2009: 172).

This example illustrates the point that even though democratic, digital peer-to-peer groups may aim to challenge or provide an alternative to different forms of domination, some form of authority is always present. O'Neil's argument is that whatever utopian hopes we might have for the internet and social media, groups will always need or have leaders of some sort. These are the so-called 'cyber chiefs' of the online tribes, and O'Neil references them in an attempt at explaining and getting past the deadlock between cyber-pessimism and cyber-optimism. On the one hand, he shows that there is an inherent democratic character to social interaction and organisation in digitally networked media. It has an equalising effect

where resolutions are reached and accepted. On the other hand, there is still no escaping the necessarily 'bureaucratic' character of any social project as such. There has to be some sort of structure and some sort of leadership – however very widely defined – to create or achieve something.

Thus, when it comes to power and dominance in digital society, it is unavoidable that leaders and authorities emerge, even though some earlier pundits may have optimistically imagined otherwise. In fact, it is expected that digital media supports this timeless social form of hierarchies and power. Some sort of power structure or leadership is, it seems, unavoidable. When writing of social forms, classic sociologist Georg Simmel (1950: 87) argued that "a group upon reaching a certain size must develop forms and organs which serve its maintenance and promotion", and furthermore that "the structure of the group requires a certain quota of its members for leadership" (Simmel 1950: 107).

6 Conclusion

The increased interest in the possibilities and necessities of digital archaeology opens the field to increasing influence from digital sociology, science communications, and media studies. In these subjects, there has been a parallel increase in the number of theories and repurposing of classic sociology in the past decade (Cavanagh 2007; Lindgren 2013; Orton-Johnson and Prior 2013; Daniels et al. 2016). It is vital to emphasise here that the heterogeneity of digital platforms and practice means that research paradigms in the study of the digital must be pragmatic. Inadequate consideration of practice and the complexities of the digital social world can lead us into a digital dualist trap, which profoundly misrepresents both the 'real' and the 'virtual'– the 'online' and the 'offline' (Jurgenson 2012). The growth in the application of computational research techniques and the expansion of digital humanities risks a preoccupation with technology and methodology, rather than reflection on the 'whys' and 'hows' of knowledge production and scholarly habitus – which are where new epistemologies of digital practice are in development. As Huggett (2004: 89) argued, "the challenge for us as expert computer users is that if we do not understand the implications and effects of the technologies employed, who else will?". The *communication* of archaeological knowledge has been systematically undervalued, as opposed to the production of archaeological data and knowledge. The communicative possibilities that digital tools afford will not be used to their full potential unless we can also understand the emergent forms of the digital practice and the communication of knowledge as a scholarly activity. Therefore, it is as important to the work of the archaeologist using digital tools, as the collection, preservation and presentation of digital information. We have yet to begin to satisfactorily answer Huggett's question.

This is a prime opportunity for those of us working in digital archaeology with theoretical approaches from digital sociology to re-assert the relevance of sociological theory to the contemporary human condition and power structures within our discipline, as well as to anticipate future social and technological trajectories, whilst observing a developing discipline. The application of a sociological lens to digital archaeology equips us to understand how archaeology and archaeological practice is situated in a social world, which is especially relevant in the Global West, where digital technology is ubiquitous and domesticated. However, without the broader attention of digital archaeologists to social concerns, the expansion of digital research methods to understand digital forms of practice risks the development of a niche specialism blinded to the human interactions, hegemonic practices, and power relationships inherent in the use of digital technologies.

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