AUTHORSHIP, PRACTICAL AUTHORSHIP AND DOCUMENTARY BOUNDARY OBJECTS IN ARCHAEOLOGICAL INFORMATION WORK

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Abstract

On the basis of an empirical investigation of archaeological information work, this paper discusses the interplay of authorship of documents and documentary boundary objects, and the practical authorship of social situations and identities and how a closer look at the *authorship* (as understood in the contemporary authorship literature) can be helpful in elaborating our understanding of the making of artefacts, (documentary) boundary objects and the social landscape. Firstly, the making of documents and other artefacts is seen as a prerequisite of the authorship and making of boundary objects and them as instruments of the practical authorship of social situations, collective and individual identities. Secondly, the notion of practical authorship is perceived to come rather a set of liabilities and privileges rather than a mere attribution of makership or ownership.

Keywords: Practical authorship, boundary objects, documentation, archaeology, reports

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1 INTRODUCTION

Documents erect and lower boundaries, communicate, translate and mediate, and more precisely, as Murphy suggests by using the term "summon", they are *made* to do so in a liminal space between communities of interest. Earlier studies have shown (e.g. Østerlund, 2008; Murphy, 2001) that this betweenness makes documents potentially powerful boundary objects (BO) that can be helpful in bridging gaps between communities and to function as shared "portable places" for virtual, non-physically based, communities (Østerlund, 2008). From the perspective of Shotter's theory of practical authors (Shotter, 1993), a BO can be seen as a nexus of multiple community-specific shared ideas of self and of the organisational landscapes constructed and produced in the process of practical authorship in the context of bordering communities. As authored intangible or physical 'things' (Murphy, 2001; Huvila, 2012), the BOs can be seen as kernels of a shared landscape of a much larger constellation that encompasses all communities adjacent to them.

In spite of the interest in how documentary BOs (DBO) come to being in specific contexts such as healthcare or museums (e.g. Østerlund, 2008;Star and Griesemer, 1989), there is relatively little research on the broader relation of the making of DBOs and especially on what implications their authorship has on their use and usefulness across communities. Further, it seems that there is no prior work discussing the relation of the authorship of BOs and practical authorship in their adjacent communities. A better understanding of the relation of the modes of authorship of BOs and their relation to practical authorship is potentially helpful in understanding why and how particular BOs are useful for different adjoining communities and how their authorship and uses are related in the processes of building and rebuilding positioning and sense of identity in various types of social constellations.

The aim of this paper is to discuss the interplay of authorship of documents and DBOs, and the practical authorship of social situations and identities and how a closer look at the authorship (as understood in the contemporary authorship literature) can be helpful in elaborating our understanding of the making of artefacts, BOs, DBOs and the social landscape. This paper draws from observations made during an empirical study of the information work of professionals working with the management and archiving of archaeological information, contemporary theorising of authorship and the notion of practical authorship of Shotter (1993), and the model of the authorship of DBOs of Huvila (2012). The present study expands the earlier observations of the individual and collaborative practices of making documents and making documents as BOs to how they are used to author translation, mediation and communication between communities and what implications the authoring and authorship of DBOs has on the practical authorship in the bordering communities. The theoretical underpinnings of the discussion on documents are based on new document theory (Lund, 2009) (or neo-documentation). Documents are seen as socially constructed entities that serve a documentary function (Pédauque, 2003) and BOs (in an essentially analytical sense) as entities with a BO function (Star, 2010).

2 BOUNDARY OBJECTS

BOs are abstract or physical things that reside in the interfaces between organisations or groups of people. They have a capability to bridge perceptual and practical differences between communities and facilitate cooperation by emanating mutual understanding (Karsten et al., 2001). BOs have been seen as premises for communication, cooperation and for having and attaining mutual goals (Star and Griesemer, 1989). Star and Griesemer (Star and Griesemer, 1989) introduced the notion in their historical study on the inform-

ation practices at the Museum of Vertebrate Zoology, Berkeley during the first half of the 20th century. BOs were described as translation devices and Star and Griesemer argued that the shaping and maintenance of BOs is central to instituting and keeping a sense of coherence across communities (Star and Griesemer, 1989). Studies have shown that very different types of artefacts including visual representations (Henderson, 1991), technical standards (Harvey and Chrisman, 1998), cancer (Fujimura, 1992) and digital libraries (Worrall, 2013) may function as BOs. Even if many things can functions as BOs, a large number of studies starting from Star and Griesemer's (1989) original investigation have found documents having this particular function. Østerlund and colleagues (e.g. Østerlund, 2008; Østerlund and Boland, 2009) have studied medical documents as BOs, Huvila (2011; 2012) archaeological reports and, for instance, Davies and McKenzie (2004) theatrical documents.

Even if the term boundary *object* might suggest that these things are relatively stable artefacts, several researchers have emphasised the dynamism of BOs (e.g. Gal et al., 2004; Brown and Duguid, 1996) and their close relation to social infrastructures (Star, 2010). Besides being dynamic as they are used, the objects themselves are similarly an outcome of a process of production as any other artefacts (Huvila, 2012). The initial discussion of BOs by Star and Griesemer (1989), later commentary of Star (2010) and perhaps most empathetically the work of Huvila (2012) put a lot of emphasis on how BOs come into being as an outcome of *making*. With documents this is especially apparent in terms articulated in the social document theory. Documents are dependent on agency both as produced and interpreted artefacts. Similarly to how making is a central premise for their use, for DBOs, their making is a central part of the process of generating and perpetuating coherence across communities (*Brown and Duguid, 1996*).

3 AUTHORING IN DOCUMENTATION AND PRACTICAL AUTHORSHIP

A central tenet of the document theory is to view a document as a result of a process of turning an abstract or physical object to a representation of something, referred to as *documentation* (Lund, 2009). Briet's (1951) example of antelope as a document illustrates this process. According to her thesis, an antelope becomes a document of a specimen when it is placed in a zoo whereas an antelope in the wild is not a document. The example puts emphasis on the significance on the *process* (i.e. documentation) of moving an antelope and the role of *someone* (i.e. author) who moves the antelope. In spite of being explicit on the activity, document theory has engaged conspicuously little in a comprehensive discussion of the forms and practices of authorship (Lund, 2009) and its implications on how the authored documents are appropriated in diverse practices and pursuits in organisations. The contrast is especially striking when compared to, for instance, literature studies, intellectual property rights research (e.g. Wirtén, 2004), science and technology studies (e.g. Haviland and Mullin, 2009), ethnography (e.g. Riles, 2006), and for instance, management (Holman and Thorpe, 2003; Lamond, 2005).

Even if the notion of authorship has been discussed relatively little in explicit terms in the field of documentation studies, the common understanding of documentation as a generative rather than translational activity and a form of the making of reality pays resemblance to how Shotter (1993), and later, for instance, Cunliffe (2001) and Shotter and Cunliffe (2003), have conceptualised the notion of practical authorship in management science. According to Shotter, managers (as active human agents) need to be more "than just a 'reader' of situations, more than just a 'repairer' of them. Perhaps a good manager

must be seen as something of an 'author' too" (Shotter, 1993, 149) of situations. The authoring is not an arbitrary activity but it "must be 'grounded' or 'rooted' in some way in circumstances others share" (Shotter, 1993, 149). Authored situations cannot be fiction without any relation to "what the unchosen conditions they face will 'permit' or 'afford" (Shotter, 1993, 149). "[A]uthorship is a dialogical practice in which features of experience and surroundings are articulated and brought into prominence" (Shotter and Cunliffe, 2003, 22). Cunliffe (2001) has Shotter's developed the idea further and suggested that authorship may relate to how authors develop a sense of who they are, collective sense of the aspects of their organisations and how they steer others to talk and act through conversations. Others including Thorpe and Cornelisson (2003) have broadened the scope of practical authorship and suggested that not not only (linguistic) language but also, for instance, visual media can function as an instrument of making in practical authorship.

In this sense, instead of being an act of reproduction, translation or transmission (even if Cooren and Fairhurst make a good case on why practical authorship also implies translation by making between communities, Cooren and Fairhurst, 2003), both management and documentation are examples of practices of constructing (i.e. authoring) premises for individual and collective pursuits. Both practical authorship and documentation studies emphasise the significance of the social dimension of making – of documents or the social landscape and operational space of organisations. The act of documentation by placing an antelope in a zoo and the role of zoos are necessarily based on a social contract in the work of Briet. The significance of documents as socially constituted entities has been further emphasised in the context of social document theory (Pédauque, 2003). Shotter and Cunliffe (2003) do similarly highlight the social and participatory nature of practical authorship and the dialogical nature of the artistic rather than scientific making of social landscape and shared and individual identities related to social space. Another broad similarity of documentation studies and practical authorship is their emphasis of making rather than reception (even if the significance of them both has been recognised in the documentation and practical authorship related literature, e.g. Pédauque, 2007; Deetz, 2003; Pedler, 2003), agency and use of things (including documents, contexts, tools and spaces) that has been common both in the studies of social documentary practices and in the management scholarship. Brown and Duguid (1996) and Star and Griesemer (1989), and consequently, the literature on DBOs share a Latourian (Latour, 1987) emphasis of the agency of documents in their contexts of creation and use, similarly to how management literature tends to be focussed on the agency in a given rather than specifically authored social landscape.

The principal difference between the conceptualisation of authorship in the documentation theory and Shotter's the notion of practical authorship can be argued to reside in the framing of action and its scope. In practical authorship of Shotter (and Cunliffe), the emphasis is on conversational practices and the constitutive nature of language whereas for the authorship of documents and BOs, language is only one of the constitutive practices and instruments of interest. Documentation theory is rather obviously interested in documents as objects and the act of documentation as their nexus of coming into being. Similarly to the BOs and the discussion on their authorship, the notion of practical authorship can be posited to put more emphasis on the implications of making. Similarly to practical authorship, the main concern with the authorship of BOs is to understand what happens as a result of a particular agency and how authorship (or agency, rather than mere reception) makes a difference in certain situations. Another way of conceptualising the relationship of the two modes of authorship is to see them as a part of a continuum and documentary authorship as a (possible) instrument of the authorship of (D)BOs as an instrument of practical authorship.

Interviewee	Description of interviewee and work duties
Karl-Oskar	Finds information administrator at a national institution
Margareta	Administrative director of a contract financed archaeological
	department a regional museum
Anna	Archivist, information manager at a national institution
Johan	Administrative director of a contract financed archaeological
	department a regional museum
Märta	Finds administrator at a national institution
Eva	Coordinator at a private archaeology consultancy
Aron	Researcher
Charlotta	Field archaeologist at a private archaeology consultancy.
Vilhelm	Archivist at a national institution
Danjel	Coordinator at a contract archaeology department, regional
	museum
Ulrika	Archivist at a national institution
Elin	Data archivist
Gladan	Administrator at a county administrative board
Lorentz	Researcher
Robert	Information manager at a national institution
Kristina	Researcher, data archivist

Table 1: Interviewees.

4 METHODS AND MATERIAL

Next we will turn to the work of Swedish archaeology professionals with special interest in issues pertaining to the archiving and preservation of archaeology to illustrate some of the pertinent aspects of the interplay of the practices of authorship of DBOs and the practical authorship of social landscape and identities. A qualitative interview study of the work of altogether sixteen professionals was conducted in 2013-2014. The aim of the empirical investigation was to explicate archaeologists' views, opinions and experiences of their own work and their understanding of the archiving and preservation of archaeology.

The interviewees represent a convenience sample of Swedish professionals with a special interest in archiving archaeology. The initial sample was formed by asking professionals who participated in a workshop on archeological archiving organised by a third party in 2013 in Sweden to participate in an interview. During the interviews of this initial group, the interviewees were asked to provide names of individuals they considered would be relevant to interview. New informants were interviewed until the interviewees did not indicate new relevant informants and on the general level of the describing the archaeological information process, the interviews had become substantially repetitive in terms of information (Rubin and Rubin, 2005). The sample is not representative of a larger population, but it can still be considered useful considering the conceptual and exploratory rather confirmatory aims of this study. For reporting purposes, the informants were assigned false names (Table 1).

The design and conducting of the interviews was based on the semi-structured thematic interview approach of Hirsjärvi and Hurme (1995). All interviews were conducted by the author, taped, and transcribed by a professional transcriber. The interviews lasted in average 60 minutes. The interviews focussed on the interviewees' professional work, their views on the current state and future prospects of archaeological archiving.

The author analysed the interviews using a method based on the combination of con-

stant comparative method (Glaser and Strauss, 1967) and close reading (DuBois, 2003). A negative negative case analysis (Lincoln and Guba, 1985) was conducted after three weeks of the original round of analysis with a specific purpose of finding contradictory evidence that would decrease the reliability of findings.

The empirical approach has apparent limitations. Findings are based on a relatively small number of interviews from a single country. This limits to the possibilities to draw general conclusions of the expressed perspectives. In order to control for the over-expression of individual views, the analysis puts special emphasis on perspectives, which are expressed by multiple interviewees. Secondly, considering the exploratory aim of the present study to provide evidence for describing the nexus of authorship and practical authorship, the possible inability to generalise is not considered to be a major issue.

5 REPORTS AND ARCHAEOLOGICAL INFORMATION

The interviews confirmed earlier findings (Huvila, 2011) that in archaeology, a foundational DBO, and in terms of Shotter's theoretical work (Shotter, 1993), a nexus of practical authorship is archaeological (investigation) report. It is the main source of information gathered during a fieldwork project (excavation or survey) whether the project is small or large, or whether it is a produced by a commercial archaeology contractor or by an academic field researcher. The contents of a report are almost always an outcome of a group effort even if the practical work of authoring the documentary artefact, liability and attribution are with the director of the investigation project. The aim of producing reports is to be able to distill and mediate all significant information of the project and its findings in a digestible form that is informative to other field archaeologists, archaeological and cultural heritage administration, infrastructural developers, archaeological scholarship, archaeologists working with public dissemination of archaeology and to a limited extent, even to the general public. A report is intended to function as a bridge or a (D)BO between the different communities of imagined and actual 'users' of the investigated site and the outcomes of the project. As informant Eva explained, "[t]he report is naturally an archive quality paper [document]" of an investigation. "One removes a site [in an excavation and], [i.e.] information, and then transforms it to information that will remain in a report". Informants Margareta and Märta made the point even clearer by referring to archaeological investigation projects as "reports" when they were describing a larger number of projects and their results.

The significance of reports and appropriate 'high quality' reporting practices is widely acknowledged in professional archaeological literature, textbooks and theoretical works (e.g. Gustafsson and Magnusson Staaf, 2001; Drewett, 1999; Lucas, 2012). Report writing and especially pro forma based (using preprinted forms) documentation have been criticised of harmful reductionism (Lucas, 2012, 233) and as Pavel (Pavel, 2010) has meticulously described, the last couple of centuries of the history and theoretical evolution of archaeology has been closely intertwined with the development of formal documentation schemes.

Partly because of their relative usefulness within and between communities and partly because of the lack of feasible alternatives, reports have retained their position as central intermediaries even if they have been criticised of being difficult to access and their usefulness especially for non-professionals has been acknowledged to be limited (e.g. Gustafsson and Magnusson Staaf, 2001; Huvila, 2006). As Margareta remarked, "nobody becomes glad of reading archaeological reports". In cases when archaeological knowledge

is brought to a broader public attention, the reports are only a part of a much broader fabric of discourse (e.g. Robb, 2009). The on-going albeit partly slow digitisation of the means of producing, managing and communicating archaeological information has a potential to change the current status quo both within the discipline of archaeology and especially in how archaeology is communicated and negotiated and authored in the interface between professional and non-professional communities. Professional archaeological authority and its premises are changing (Richardson, 2014) similarly to the archaeology itself when it is authored in practice with a new set of digital tools (Huvila, 2013).

Even if the report is confronted by alternative artefacts, it has shown considerable resilience. The significance of reports as archaeological BOs is underlined by the long-lasting debate on the necessity, extent and methods of archiving other forms of information originating from an investigation (e.g. Richards, 2002). The importance of other types of data including first-hand observations, data and notes used while writing the reports, measurements and images is regularly emphasised in the literature, but in practice, they tend to be difficult to access, may or may not be available and are seldom asked for or used. From this perspective the prominence of reports as BOs depends on the lack of feasible alternatives up to date.

6 REPORTS AND PRACTICAL AUTHORSHIP

In addition to functioning as accounts and documents of the investigation work and a DBO between different communities of readers, from the perspective of the work of Shotter and his colleagues, reports appear as a central instrument of practical authorship within the social context of archaeology. As Anna noted, the most of the people who came to her organisation to find information were interested in reports: "archaeologists want to get an overview and to see what have been before". The articulation of the significance of a particular archaeological site, the setting of the priorities of the investigation, the making of individual and shared identities of the fieldwork team and of the social landscape of archaeological work is conducted to a significant extent as a part of the work of documenting the field work and authoring (and preparing for the authoring of) the final report. As informant Eva noted, an investigation is archived "through the report", which essentially turns the report into a representation of the investigated site and the investigation process. In this sense, the imagined and actual modes and practices of authoring a particular DBO are intricately intertwined with the practical authorship of the operational space and social landscape within one workplace (an individual fieldwork project) but also through its quality as a DBO with the practical authorship and collective making of the social space of and identities within archaeology as a whole.

7 AUTHORSHIP BEYOND MAKING

A declaration that reports are a central instrument of practical authorship in archaeology may sound as stating the obvious. Similarly, it may seem too apparent to assert that reports are secondarily made to act as DBOs between different stakeholder communities of archaeological information from researchers to administrators and, to a certain extent, the general public. Further, it probably sounds reasonable that the authoring of the reports to become DBOs is a fundamental step in how they eventually become useful in the managerial making of the social landscape and identities. Both documentalists and the scholarship on practical authorship put a lot of emphasis on the agency of author as a maker. Authors create documents and are makers rather than readers or repairers of

situations but rather agents who make the social space and the individual and collective identities within.

The somewhat less obvious aspect of the process is that according to indepth studies of authorship, it is not merely a question of making. Even if the perspective of making has proven to be highly useful in the context of document theory and in the context of understanding managerial practices and organisational learning, from the perspective of the scholarship of authorship (Wirtén, 2004), it is close to the "simple way of defining authorship" (Huvila, 2012), a question of determining and acknowledging who is a creator of a thing (document or social landscape). In contrast to this perspective to authorship, Hemmungs Wirtén (Wirtén, 2004) shows that the prevalent myths of solitary and directly attributable forms of authorship and the consequential assumption of an ownership are highly problematic notions. The introduction of technologies of production and reproduction including xerography and digitisation of information have underlined the shortcomings of the approach and contributed to the revoking of the myth (Wirtén, 2004). Instead of defining authorship as unambiguous intellectual ownership and parenthood, Love and Biagioli suggest that authorship should rather be seen as a form of social attribution (Love, 2002) of certain privileges and liabilities (Biagioli, 2006).

The conceptualisation of authorship in terms of prerogatives and responsibilities does not imply that the act of making would be insignificant. Authored works still have processes of coming into being and, for instance, to cite the example of xerography discussed by Hemmungs Wirtén (Wirtén, 2004), the person who uses a copying machine is not an insignificant agent in how a thing is created and made available for certain actors and activities. What is also significant, however, is that a closer look at the privileges and liabilities in the context of the making of (D)BOs and practical authorship has certain implications to understanding these activities and their outcomes. Both for (D)BOs and the social landscape, the identity and especially the agency of and the decisions made by the (practical) authors have direct consequences to how adjacent communities can work together and how a particular social landscape functions, for instance, in an organisational context as a platform for reaching specific goals. A part of the process of how things emerge during these processes is how they are perceived and received and to whom their related privileges and liabilities are attributed.

In archaeology, the report and the investigation is traditionally a domain of the director of the investigation even if the project itself is in most cases a group effort. Only very small investigations and surveys are carried out by a single archaeologist. The attribution has direct consequences to how other archaeologists read the documentation, how reliable it is, how it is interpreted and what are the implications of the text. Sometimes, as Pavel (2010) notes for instance of the well-known investigator of Troy, Heinrich Schliemann, the reputation of an individual has lead to underrating of particular observations even if a closer look would suggest something else.

In the context of an investigation project, the attribution of the authorship of the social space has also broader consequences to knowledge creation process than to the quint-essence of a particular, albeit significant and influential documentary artefact. Similarly to how the project director is in a position to author the social landscape within which archaeological knowledge of a particular site comes to being, influence the emergence and to a degree form both the collective and individual identities of the stakeholders of the process, the ways how the social situation is played and experienced depends on how the participating individuals perceive and act upon the liabilities and their holders. Moreover, what might be even more significant is that the attribution of the liabilities and privileges related to the act of making may be of a more decisive significance in the future than the mere act of making, which can be to a certain extent delegated, given and taken over.

8 MAKING, LIABILITIES AND PRIVILEGES IN AR-CHAEOLOGICAL INFORMATION WORK

The authorship related liabilities and privileges could be observed in several passages in the interview transcripts. The general impression of the archaeological information process described by the informants is to a large degree of based on an assumption of the stability of the collective and individual identities of the central stakeholders in the social landscape of archaeological information work. The making of certain outputs, most importantly the investigation report and to a lesser degree of the physical finds (artefacts) and raw documentation data are of central significance in how the social situation of an archaeological investigation comes into being (i.e. is made). Even if the tangible act of the making of a situation is central to its outcomes, in practice, the actors do often rely on proxies, and the making and the existence of physical objects and the situation itself is assumed on the basis of liabilities and privileges rather than directly verified.

Firstly, the subtlety of the forms and implications of authorship can be observed in the context of making archaeological documentation. Even if it is apparent on the basis of the analysis that the original maker, the excavating or surveying individual or organisation is the principal maker (author) of documentation, report, DBO and other data, including retrieved finds and the social situation of an archaeological investigation with its related collective and individual identities, the interviews showed that there are other authors and authorships as well. The complexity of the contemporary archaeological information process (Huvila, 2014) means that not all making or liabilities and privileges land on one actor only. From the perspective of the contemporary theorising on authorship and the notion of practical authorship, it is apparent that both archivists (cf. Märta) and finds administrators (as explained by Danjel) have the double liability and privilege to act as authors (as gatekeepers to information) of the social situations related to the investigation and its outcomes. This is in contrast to the traditional tendency, common to many fields of scholarship (Borgman, 2007, 174), to perceive excavating archaeologist-authors as the owners of 'their' sites, documentation and finds (Richards, 2004). Danjel's description provides evidence of a change towards a more nuanced understanding of authorship also in the context of the daily work archaeologists. Danjel explained that instead of owning the outcomes, he has a dual role regarding the outcomes of his fieldwork. As a project director and excavating archaeologist he claims an 'authorship', including privileges and liabilities, of that what he has accomplished (i.e. made). As a researcher and user of that data, however, he considered that he is required to access the data in a similar manner as a non-maker (of the particular materials), as any other researcher with a different set of liabilities and privileges but at the same time as a maker and author of new documents and DBOs, and as a practical author of new social situations emerging from the interplay of other documents and tools and another process of making.

A second parallel but contrasting example of the interplay of making, liabilities and privileges can be observed in the context of administrative work. Gladan who is working as an administrator of contract archaeology work, admits that she does not have time to read all reports submitted by contractors. She does, however, think that the high level of professionality of the contractors, her overseeing of their work and reporting process, and the general requirement of the contractors to process finds and submit documentation within a given timeframe guarantees the quality of the outcomes. Instead of making remarks on the actual act of making of a document, secondarily a DBO and thirdly by bringing the (boundary) object into existence or of making of the social situation within which a particular archaeological site is available and exists in the future, she refers to process of making through a set of liabilities and privileges. Contractors have a liability

to her to ensure that investigations are adequately (or, as the national guidelines state, in a way that "scientific [scholarly] content of the site becomes available for researchers and the general public" RAÄ, 2012, 4) documented. In a secondary authorship role of the DBOs and the situation, Gladan has a liability to see that the contractors do what they are expected to do and to ensure that the DBO is of acceptable quality. At the same time, because of their professionalism and the dependability of the information process, the authorship means that the contractors have a privilege to conduct their work (i.e. making) as they consider to be appropriate and that as authors of the BOs and other outcomes of the process, to be privileged by the attribution of being authors of the particular investigation process and its outcomes. The privilege translates to a tangible possibility to use reports as marketing material on the web (as noted by Eva and Margareta) and for contractors, to a competitive advantage in the (quasi-)marketplace of archaeological tenders. The authorship translates also to the privilege and liability of becoming the principal authority of the investigation that others potentially contact and interrogate in the future (as explained by e.g. Margareta and Johan). As Margareta and Märta critically remark, in cases when the explicit liability to deposit other research data than finds and a report does not exist or it is not enforced, these materials often remain in the custody of their makers (contractor) and from a societal perspective, the preservation of and accessibility to these materials cannot be guaranteed.

The accounts of contractors and administrators, it is apparent that archivists and finds administrators might have some reluctance to assume an explicit role as (practical) authors. According to Danjel's account, the (practical) authorship of archaeological information work and both the exercise of making documents and DBOs and their associated liabilities and privileges are shared by several actors on a temporal continuum. According to the administrators and contractors, his idea of shared authorship might not apply everyone and everything. Ulrika noted that in the archives, there is a strong tendency to the black-boxing of documentation and finds. Everything archaeologists submit from investigations is archived as is without critical consideration and appraisal of its nature. Even if archives and museums are privileged by a degree of authorship in the social landscape of archaeological information work by keeping certain documents and DBOs, they avoid taking responsibility and an active authorship role.

9 CONCLUSIONS

The observations made in this text have twofold implications. First, the proposition of relating authorship and the making of documents (and other artefacts) as a prerequisite of the authorship and making of (documentary) BOs and the making of BOs as an instrument in the context of the process of practical authorship provides a framework for explicating the roles of objects and documents and (documentary) BOs in the process of the making of social situations, collective and individual identities. Even if this text has focused on such deeply linguistic objects as documents and DBOs, there is nothing that defies the possibility to see authorship as a broader activity of making beyond the linguistic realm. Besides (linguistic) conversational practices, archaeologists engage in similar visual conversations Thorpe and Cornelisson (2003) describe in their study of the visual media use of managers, when they are drawing and taking photographs of sites and finds. In addition archaeologists can be argued to be participating in *material conversations* by unearthing sites using particular (partially highly similar, partially divergent) methods and and by recovering, keeping and working with physical artefacts.

Secondly, the proposition to elaborate the notion of authorship in the context of practical authorship with the premises derived from the contemporary authorship theories nu-

ance the idea of practical authorship as a practice that goes beyond the (act of) making of social situations. Practical authorship implies also a set of liabilities and privileges than a mere attribution of makership or ownership. This expands the understanding of the implications of practical authorship for practical authors, whether they are managers or employees. As Shotter (1993) suggests, managers can and should be authors of the social landscape in their organisations and able to take an active role in the making of the individual and collective identities that contribute to organisational learning and knowledge exchange. What should be considered further is that the practical authorship and specific measures of assembling social situations come with particular liabilities and privileges that relate to the specific process of making, an exercise, which is, as Deetz (2003) emphasises, a dialogic process. Practical authors do not own 'their' situations they have made but are responsible for them and have certain rights and liberties that are inscribed (i.e. authored) in them. These liabilities and privileges can be plausibly argued to have implications on both the process of making (how situations are and should be authored) and also to how the different authored situations evolve, both like author possibly expected and in contrast, how they become something completely different and unexpected.

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