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Battle or ballet? Metaphors archaeological Facebook administrators live by

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ABSTRACT

The emergence of online social networks such as Facebook provide new opportunities for communication between archaeologists, and between archaeologists and communities. In this study, we used qualitative text analysis and conceptual metaphor analysis of conversations with eleven European archaeological Facebook site administrators to understand their motivations and ideas. We found that altruistic motivations coexist with emotional, career, and social capital expectations, that pseudo-archaeology and political weaponization of archaeology are major concerns, and that participants' conception of themselves and the archaeological Facebook sites they manage are based on multiple conceptual metaphors, revealing different, deliberative vs. agonistic, conceptions of social media community interaction, while top-down metaphors are contested by participatory, bottom-up metaphors, pointing to important dilemmas for the poetics and politics of contemporary public archaeology.

KEYWORDS

Social network sites; Facebook; public archaeology; archaeological practices; grassroots communities; conceptual metaphors

Introduction

Online social media platforms are extensively used by academic archaeologists, archaeological heritage management and communication professionals, amateurs and members of descendant and indigenous communities engaged with archaeology. This is because many in the field now recognize the need for openness and participatory approaches to archaeological research, communication and resource management (Moser et al. 2002; Morgan and Eve 2012; Atalay 2012). Also, because Web 2.0 technologies and approaches are now much more broadly available, and used, across the whole spectrum of archaeological work (Kansa, Kansa, and Watrall 2011; Dallas 2015; Bonacchi 2017).

Numerous studies show that social web engagement in archaeology can foster productive relationships and establish meaningful spaces for knowledge-making among archaeologists, and knowledge-sharing between archaeologists and the public. Yet most of them focus mainly on actuality and normative practice, aiming to explain what happens on social media and what institutions and professionals should do foster public engagement. In our study, we take a different approach by refocusing on people, their cognition and agency. We believe that the ideas of archaeological Facebook sites' administrators are shaped by and affect the work that they carry out on Facebook, and thus they provide valuable insights on archaeology-related community practice. We, therefore, focus on administrators as central actors in archaeological social media activity and seek to grasp their ideas and perceptions about their Facebook practice. We are interested to know: what shapes the

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actions of administrators and what motivates them to engage actively with archaeology on social network sites? Also, how do these people represent themselves, and how do they understand their role? And how do they conceive the Facebook page or group they run?

Drawing from the ideas of 11 administrators of archaeology-related Facebook pages or groups, our focus in this study is therefore to investigate one particular aspect of the use of Facebook by archaeological communities: namely, to understand the motives, perceptions and challenges for archaeological communication on social media faced by administrators, and the way they conceive their Facebook site and their own identity, as expressed in their own words. In the following sections, we offer a brief assessment of relevant research on archaeological communication on social network sites and establish the rationale for our study, then we present its scope, objectives, methodological approach and research process, followed by a presentation and interpretation of the key findings of our analysis as regards administrator profiles and conceptual metaphors activated by administrators about their Facebook site and their work. We conclude by situating our findings in the context of broader questions facing the scholarship and praxis of public archaeology.

Archaeological communication on social network sites

Review of relevant literature

Ever since their emergence, social network sites such as Facebook and Twitter attracted strong archaeological interest, mostly involving researchers of public, theoretical and digital archaeology. Alongside weblogs, such platforms were seen from the outset as potentially fruitful conduits for outreach in archaeology, broadening its audience and increasing the discoverability of archaeological content (Whitcher Kansa and Deblauwe 2011; Richardson 2012; Rocks-Macqueen 2016; Wakefield 2020), and promising to become one useful way to communicate archaeological knowledge vis-à-vis traditional information dissemination channels (Matthews and Wallis 2015). Social network sites appear as effective media to share scholarly resources with a wider public (Walker 2014a; Haukaas and Hodgetts 2016; Patania and Jaffe 2018). Viewed from the point of view of academic and professional archaeologists, online social networks were further claimed to be useful in fostering scholarly communication within archaeological communities (Beale and Ogden 2012; Richardson 2012; 2015; Delgado Anés, Pellitero, and Richardson 2017; Hagmann 2018), whereas online collaboration and collective expertise within specialized professional social network sites might also help improve the quality of archaeological research (Morris 2011; Whitcher Kansa and Deblauwe 2011; Richardson 2015), bringing the greatest benefit to young researchers who are the most active participants in online networks (Whitcher Kansa and Deblauwe 2011).

On the other hand, it was noted that social media encounters between professional archaeologists and communities of interest such as metal detectorists can be fraught with tension, as online meaning exchanges may accentuate polarization between these two groups despite their seemingly similar interests (Axelsen 2018). Furthermore, the impact of using social media for archaeological communication was reported to have limited uptake, due to an array of issues related to barriers to technology use in practice, such as corporate communication policies, digital literacy, costs, ICT infrastructure, ethical challenges, regional traditions and individual attitudes (Colley 2014). Working with social network sites, as well as other types of social media, is resource heavy: organizations are asked to consider additional financial and human resources to make communication efficient, while individual participation involves also multiple personal investments needed for engagement (Beale and Ogden 2012; Laracuente 2012).

Archaeology-related social network sites were included among a wider range of open and constantly changing but also coherent and systematic practices of public, non-professional archaeology, situated in an 'archaeological periphery consist[ing] in the interconnections and creolization of professional archaeology with other, culturally more distant sign structures which lie outside the realm of scholarly knowledge' (Laužikas et al. 2018). Similarly, social network sites enabling user-generated

content were perceived as boundary-crossing global formations which occupy the middle space between traditional archaeological dissemination and casual conversation, but which, within the framework of the participatory web, usually engender a gap between professionally produced archaeological data and non-professional, or community, participation (Whitcher Kansa and Deblauwe 2011; Richardson 2012). From one point of view, this calls for archaeologists to provide a voice of authority in representing the discipline in a public arena (Richardson 2012; Tarlow and Stutz 2013; Sánchez 2013); however, this need often mutates into reinforcing archaeological authority at the expense of genuinely de-centred public engagement or social collaboration (Walker 2014b). For example, it was noted that the use of Twitter to communicate with non-archaeological publics may create friction with organizational policy and structure, at the face of a notable lack of guidance for using the platform (Richardson 2012; 2015). This is a common issue in many institutional settings enabled by digital technologies, because most institutional websites tend to replicate the architecture of institutional hierarchy in the less hierarchical spaces provided by social media, which occasionally (and ironically) are illustrated by images taken from institutional websites; on the other hand, community-driven initiatives are usually based on a 'grassroots and up' approach, using more accessible platforms, including social media, for cultural discussions, debates, documentation and the promotion of group identity (Brown and Nicholas 2012). As Lorna Richardson notes, the main challenge in public archaeology is how to avoid 'participatory ventriloquism' responsible for the effective injection of a top-down approach to public and community archaeology on the Internet, and engendering the 'risk of performing our-self-defined roles as archaeologists in the digital realm, through advising non-archaeologists what to read, ask and contribute through Internet technologies and our social media platforms, rather than consider the needs and interests of the audience' (Richardson 2014).

To address this problem, multiple studies focused on presenting strategies by which social network sites can promote archaeological heritage while engaging equitably with the public in a spirit of genuine participation (Richardson 2014; 2015; Huvila 2014; Williams and Atkin 2015; Morgan and Pallascio 2015; Kelpšienė 2019). This appears particularly relevant to archaeological museums, where platforms such as Facebook are used both for marketing purposes and for digital communication employing a participatory multi-vocal dialogue (Pett 2012; Bonacchi and Galani 2013; Marakos 2014; De Man and Oliveira 2016). Yet while it is generally accepted that engagement with audiences is a key component of digital public archaeology, there is typically no clear consensus on methods or measurements of engagement (Wakefield 2020). Several studies focus on understanding how social media audiences and their engagement with social media (Bonacchi and Galani 2013; Matthews and Wallis 2015; Wakefield 2020) could help develop better ways for communicating archaeological information. For example, an online engagement strategy for the 'Must Farm' commercial excavation demonstrates the immense potential for social network sites to enable meaningful interaction with users even within limited time and with limited financial resources (Wakefield 2020).

As sites of social and cultural interaction among professional archaeologists, and between archaeologists and broader communities, social network sites become consequential arenas for the enactment of social and cultural practices involving, and often reproducing, established power structures, contemporary political conflicts, and long-held, systemic social inequities and exclusions, including those based on race and gender. Recent studies showed how perceptions of the archaeological past in the United Kingdom were weaponized on social network sites in the context of the Brexit campaign (Bonacchi, Altaweel, and Krzyzanska 2018) and how, more broadly, archaeological heritage is brought to bear on nationalist discourses on social media (Bonacchi 2022). Other studies highlighted how social network sites not only empower archaeological agency and even disrupt dominant narratives of authority and exclusion, but, like a double-sword, can also lead to 'widespread social web-based abuse of archaeology, heritage and museums professionals [in the context of a] virtually non-existent architecture of protection, prevention and penalization for such abuse' while, also, exploiting users' unpaid labour online (Perry and Beale 2015; 157: Perry, Shipley, and

Osborne 2015; Cook 2019). Overall, it has been acknowledged that online communication poses multiple ethical challenges for digital public archaeology, including privacy, digital surveillance, and online harassment and abuse (Richardson 2018; Dennis 2020).

The complexity of the use of social media in archaeology has been also associated with conceptual and technological differences between social media platforms, as their affordances may influence how archaeological representations operate (Huvila 2014). For example, Isto Huvila notes that Facebook is 'heavily colonized by representations of professional and academic archaeology' while Twitter presents 'a cacophony of professional and non-professional voices of individuals and organizations' and adds that both platforms are different from Pinterest, which is more 'collector centric' and privileges 'the significance of imagery and impressions of the spectator' (Huvila 2014). This might support the argument that Facebook might be more suitable for networking and Twitter for information broadcasting. Nevertheless, despite technological challenges, researchers indicate an existing gap between expert opinions and public narratives, which don't just lie in the very nature of shared content and ways in which they choose to communicate, but also in the lack of interactivity between different online communities sharing the same interests (Morgan and Pallascio 2015). For institutions seeking to engage with the public through social network sites, this practically means that they need to diversify their approach to online public outreach, and to consider 'pockets of viable community' where meaningful performative collective memory is exercised and engagement with stakeholders happens on their terms (Morgan and Pallascio 2015). Such insights on how grassroots communities operate significantly contribute to a broader understanding of the use of social network sites in archaeology, and of how archaeology is constituted in these communities when compared to the institutional outlets of communicating archaeological knowledge.

The motivations and profiles of institutional actors actively involved with archaeological communities on social network sites vary significantly. Communities also differ in how they create conditions for collective practices of memory and material engagement, how they enact professional and cultural identities, how they shape the production of archaeological knowledge, as well as how their members participate in the interpretation, appropriation and governance of archaeological heritage. As Chiara Bonacchi (2017) argues, online engagement with archaeology is a mix of two possible approaches to communication, corresponding to two major ways in which interactions between community members are carried out: the 'broadcasting mode of digital engagement', an one-way form of communication preferred as a digital communication strategy by many museums and archaeological bodies; and a less common participatory kind of digital engagement, inviting direct input from organizations and citizens to initiate activity (Bonacchi 2017). This idea echoes Jenny Kidd's (2011) conclusion that institutional museum communication on social media falls within one of three frames: the marketing frame, aiming to define the museum's public identity by promoting its activities, this being the one most often applied in museum communication; the inclusivity frame, focusing on creating a virtual community; and, finally, the collaboration frame, oriented towards the creation of new heritage interpretations and social narratives.

Rationale of the study

As this overview shows, archaeology-related activity on social network sites has already been the focus of multiple publications. Much of the literature focuses on the capabilities of social network sites, their potential benefits for archaeology, and conundrums such as 'participatory ventriloquism'. Others offer advice and strive to establish norms on what constitutes good practice in archaeological communication on social network sties, how should professional archaeologists and organizations use them for, and what ethical principles should guide their activity. Some focus on how power structures, inequities and exclusions based on gender or race, and ethical challenges such as online abuse and unpaid digital labour, underlie archaeological interaction on social network sites. An additional array of studies focuses on presenting how authors themselves, and their projects or institutions, are using social network sites for archaeological communication to best advantage.

Twitter and Facebook have been two major social network sites chosen for archaeological communication, but they bear significant differences in how they operate. While Twitter has been hugely popular among digital and some non-digital archaeologists as a conduit for the dissemination of archaeological information and engaging in (often polemical) debate, Facebook is especially relevant as a domain for purposeful communicative action, and community building, enacted by the affiliative power of digital objects shared by users (Dallas 2018). Unlike Twitter, Facebook users purposefully become followers of specific Facebook pages and members of specific Facebook groups, both of which have been the object of purposeful creation and remain the domain of purposeful moderation and management work conducted by administrators. Yet while there has been significant research on the communicative activity, purpose and profile of archaeological communities on Facebook, there has been no published study focusing on archaeology-related Facebook page or group administrators. As a result, there is still limited understanding of the profile, ideas, discourses and self-conceived identities – the 'socially and culturally constructed realm[s] of interpretation' or 'figured worlds' (Holland and Lachicotte 2007, p. 115) – of people central to the creation and administration of archaeological communities on Facebook. Indeed, much of the scholarly conversation on the reasons why archaeology-related Facebook groups or pages have been created, what motivates those who dedicate time and effort in administering them, how administrators understand their role about archaeology and Facebook, and what are the tacit cognitive schemas underlying how archaeology-related Facebook sites are conceived, is the object of speculative thinking and normative authorial advocacy, rather than of evidence-based argument putting the voices of archaeological Facebook site administrators in the centre. Our study aims to contribute to filling this gap.

Context, objective and research questions

Our research was conducted in the context of 'Archaeological practices and knowledge work in the digital environment' (ARKWORK) COST action (https://arkwork.eu). Within its 'Archaeological knowledge production and global communities' working group, we explored the relationship between archaeological knowing and various communities of interest engaged in archaeological knowledge production. Even though we both have a background in archaeology, our research focuses on understanding digital and social media practices in archaeological research and communication, and more broadly on digital cultural heritage, memory and identity work. We are driven by an interest in participatory and grassroots practices linking heritage and the past with contemporary cognition and action. Therefore, we do not consider ourselves as archaeologists, but rather as informed outsiders viewing online archaeological communication practices as a domain of study.

In this paper, we introduce the results of an exploratory study based on qualitative text analysis, metaphor analysis, and interpretation of scoping interviews and a focus group discussion with Facebook administrators of archaeological communities from different European countries conducted in 2018. Instead of focusing on the activity of archaeological organizations, we considered the role of individuals (i.e. professionals, 'pro-ams' and amateurs) who manage archaeology-related pages or groups and moderate their activity on Facebook. The objective of our research was *to find out more on the underlying perceptions behind the scenes of archaeology-related Facebook communities, based on how administrators, as important communicative actors, perceive their Facebook page or group, as well as their involvement, motivations and role.* We asked Facebook administrators who participated in our study to reflect on their experience related to Facebook community management because we were interested in their ideas about the work and moderation of these communities, as well as in their perceptions on archaeology and on the role of social network sites such as Facebook in the context of archaeology.

Unlike previous studies investigating activities on Facebook archaeological sites, we focused on how administrators *conceive* the practice they are engaged in, as manifested in their sayings on how they became involved with archaeology and Facebook, and especially in the metaphors they employ

to conceptualize their Facebook site and themselves in relation to it. Specifically, we sought to address the following research questions:

RQ1. How do archaeological Facebook site administrators represent in their talk their background, motivations, and involvement with archaeology and Facebook?

RQ2. Which metaphors do they use to represent their role in managing archaeological communities on Facebook?

RQ3. Which metaphors do they employ to represent archaeological Facebook sites and their functions?

Approach and research process

Research framework

Our study is based on conversations with 11 archaeological Facebook site administrators. It is qualitative rather than quantitative and idiographic rather than nomothetic (Lindlof 2008). We, therefore, do not consider participants as a representative sample of all archaeological Facebook site administrators and do not claim generalizability or predictive power of our results. Nevertheless, to ensure coherence in our findings, we applied principles of triangulation across research questions, and saturation across the full transcript of conversations we had with participants, and we are confident that we represent adequately their ideas regarding archaeological communication on social network sites. Our axiological stance is participant– rather than investigator-centred, consistent with an epistemological stance of strong objectivity (Harding 1995). We, therefore, deem interviewees not to be study subjects but interlocutors and deem ourselves responsible to act as facilitators and mediators for their voices to be heard.

We adopted a constructionist ontological stance (Talja, Tuominen, and Savolainen 2005; Restivo and Croissant 2008) in our study. Unlike realist ontological approaches followed by a multitude of earlier studies that aim to produce knowledge on actual archaeological practice on social network sites, our object of inquiry consists of participants' conceptual constructions as manifested in their sayings. In other words, in conducting and analysing scoping interviews and a focus group discussion with archaeological Facebook site administrators, we tried to identify cognitive aspects involved in the Facebook practice, manifested in what they expressed in their sayings. In our view, a constructionist approach reveals important dimensions of the viewpoints of administrators, who are central in shaping Facebook activities, archaeological content, and relations with the community through their daily engagement with members and gatekeeping role on Facebook.

To analyse conversations, we drew from metaphor theory, which considers metaphors to be 'a cross-domain mapping in the conceptual system' rather than a mere rhetorical trope (Lakoff 1993). Previous research suggests that conventional metaphorical concepts are central to cultural cognition, and they are present in numerous forms of human expression, including speech, ritual, narrative and material culture (Ortman 2000). According to conceptual metaphor theory, *metaphorical expressions* as linguistic expressions (a word, a phrase, a sentence) used in ordinary everyday language – are surface realizations of a finite repertoire of underlying *conceptual metaphors* applying across domains, such as, for example, life is a journey (Lakoff 1993). However, in line with our social constructionist approach, we adopted the critical view that such metaphors are not universal, but can only be understood in the social, cultural and embodied context in which they emerged (Gibbs 2011; Kövecses 2015; Musolff 2017).

Case selection and research process

With the help of ARKWORK COST action network members from 21 European countries, we identified 122 archaeology-related Facebook pages representing archaeological organizations, nonprofits, associations, governmental institutions, universities, museums, professional networks and amateur initiatives. We applied purposive sampling to select Facebook communities suitable for our study, based on their descriptions and nature of their content. We thus identified 32

communities that act in the realm of public archaeology and represent both grassroots and professional dimensions, considering a diversity of community types from museums, societies and archaeological organizations to fieldwork projects, professional networks, bloggers and archaeology enthusiasts. We sent invitations to the 32 selected Facebook pages/groups inviting administrators to participate in a short 20-minute scoping interview. We received 14 replies, whereas admins of 11 Facebook pages or groups agreed to be included in the study (Table 1).

We conducted six scoping interviews online and one in person, and collected four responses in writing in those cases when a participant expressed such preference (Table 1). Of the 11 administrators who responded to our questions, 5 (identified as Nos. 1–5 in Table 1) were also available to take part in an online focus group discussion in the period indicated in our invitation. Participants included Facebook administrators from six European countries (Croatia, Cyprus, Greece, Italy, Lithuania and the United Kingdom) and one from Israel. Even though we sought to maximize the diversity of countries represented in the study, administrators from Greece and Lithuania were more responsive, perhaps because of affinity with our nationalities. The language barrier may have been an important limitation in our study, and perhaps the main reason why we failed to recruit participants from other European countries such as France, Germany, Spain, etc.

All archaeological Facebook site administrators in the study provided us with formal informed consent to collect, store, analyse and share any personal information and ideas they contributed to our conversations through research publication and communication. All participants agreed for their Facebook site to be identified by name, and all but one (further identified by the pseudonym 'Harry') also provided informed consent that their name and details of their identity be revealed in publication. In addition, all participants were able to review our manuscript before publication, and nobody objected to how their ideas and personal information were represented. We espouse a values-based rather than rules-based research approach to research ethics, driven by fundamental research ethics principles of *respect for persons, beneficence, justice,* and *respect for law and public interest* (Childress, Meslin, and Shapiro 2005). Therefore, even beyond the informed consent offered by participants, we chose to omit some information which we considered might expose some participants to potential harm.

We initially conducted scoping interviews to collect information on how administrators represent themselves, their background and activity on Facebook. We asked each interviewee to describe their relation to archaeology and their motives to engage with an archaeological page or group on Facebook. Also, we asked them to talk about the origin, history and goals of their Facebook site and community. We found scoping interviews useful to give us a sense of the ideas of administrators driving these social network sites and communities. This helped us determine focus group questions, and especially identify particular probing areas relevant to the personal background and motives of different participants. The focus group discussion revolved around questions concerning the curation of archaeology-related content on Facebook by administrators, norms and beliefs shaping the moderation of a Facebook site, perceptions of how community members engage with and participate in Facebook activities, and challenges in managing social networking sites and member interactions.

We recorded and transcribed fully the scoping interviews and the focus group discussion. This produced a rich corpus of evidence. We imported the transcribed files into the MaxQDA computer-assisted qualitative data analysis software for coding, analysis and interpretation. We adopted methods of qualitative text analysis (Kuckartz 2014) to conduct our investigation. To analyse the coded data, we developed and used a provisional code system allowing us to identify segments of transcribed talk related, first, to archaeological (heritage) entities, information objects, people, events, as well as means and factors entering Facebook communication and administration, practice, and, second, to metaphorical expressions, ideas and questions raised by participants. We also considered codes related to theoretical notions used in social media research, such as presentation of self (Goffman 1959; cf. Hogan 2010), frame analysis (Kidd 2011), virtual communities (Parks 2010), sharing, attention, popularity and gatekeeping (Dijck 2013), and participatory heritage (Giaccardi 2012). We found these notions useful for conceptualizing motivations, norms, and processes of

Table 1. Basic information about administrators and Facebook pages/groups involved in our study (2018).

Nos.	Facebook adminis-trator	Country	Name of Facebook page/group and link	Type	Year of creation	Number of followers (in 2018)
1.	Mindaugas	Lithuania	Archeologas.lt https://www.facebook.com/archeologas	Page	2015	751
2.	Vendi	Croatia	Arheologija https://www.facebook.com/Arheologija	Page	2012	3251
3.	Zeta	Greece	Archaeology & Arts https://www.facebook.com/archaeoarts	Page	2015	2452
4.	Federico	Italy	ArcheoScavi https://www.facebook.com/archeoscavi	Page	2017	1044
5.	Irini	Greece	The Ottoman Era Monuments of Greece https://www.facebook.com/groups/128884463816740	Private group	2010	4438
6.	Nancy	Greece	Aegean Archaeology https://www.facebook.com/groups/12556446054	Public group	2008	3804
7.	Marius	Lithuania	Archeologija Lietuvoje https://www.facebook.com/archeologija	Page	2014	2913
8.	Eleanore	Israel	Archaeology of Israel-ארכאולוגיה של ארץ ישראל https://www.facebook.com/groups/hebrew.archaeology2	Private group	2013	1861
9.	Grigoria & Thea	Cyprus	Cyprus Archaeology https://www.facebook.com/pg/cyprusarchaeology	Page	2015	981
10.	Harry	United Kingdom	Love Archaeology https://www.facebook.com/LoveArch	Page	2011	2077
11.	Nicola	United Kingdom	Museum of London Archaeology https://www.facebook.com/MOLArchaeology	Page	2012	12199

initiating and managing the life of archaeology-related Facebook sites, as well as their potential as sites for identity and memory work, participation and archaeological agency.

In alignment with our research framework, we used metaphor analysis as a qualitative research method (Schmitt 2015) to identify *conceptual metaphors* that administrators used to characterize their work, to describe their Facebook sites and interactions with users as manifested in *metaphorical expressions* used by them in our conversations. To do so, we mapped metaphorical expressions in the transcripts with underlying conceptual metaphors they manifest. We applied a hybrid approach to coding metaphorical expressions and metaphors, which combined predefined codes (prompted conceptual metaphors) in our provisional code system, as well as inductive 'open' coding (unprompted conceptual metaphors). Codes of prompted metaphors were obtained from scoping interviews and introduced to the focus group discussion for further extrapolation. Codes of unprompted metaphors were created inductively, by identifying metaphorical expressions used by focus group participants, and were aimed to capture dimensions of archaeology-related Facebook communities and practices not already included in the provisional code system. In line with our axiological and epistemological position outlined above, the way our analysis results are presented in this paper is by placing the sayings of participants in the centre, rather than hiding them behind synthetic, or normative, statements of ourselves as investigators.

Analysis and interpretation

Conceptions of administrator background, motivations and engagement

Our scoping study revealed that in 10 out of 11 [sp.] cases the administrators of archaeology-related Facebook communities are archaeologists, 3 of whom hold a Master's degree, while 7 are conducting

or finished a PhD in archaeology. Not all of them currently work in the field of archaeology, but those who don't still seek to maintain their professional interests and connections with the field. All of them asserted that the work of managing or moderating archaeological communities on Facebook is one important way to maintain their professional interests or to keep in touch with archaeology. For example, Nancy, who for the last few years has not been working in archaeology, still self-identifies as an archaeologist, and describes her relation with archaeology as follows:

> I am an archaeologist. I don't practice archaeology anymore as a profession, but I am an archaeologist. I have degrees and postgraduate degrees. And I worked as an archaeologist for many years. I had participation in many projects and excavations and research projects. And now for the last two years I don't practice it professionally. But I still try to be in touch with the archaeological world. I still try to follow some news at least for the regional news that were more to my interest, because I was a prehistorian. (Nancy)

Two participants, on the other hand, declared that they are not archaeologists. One admits to being an archaeology enthusiast and considers it a hobby in which he engages because he finds archaeology enjoyable:

> I am not an archaeologist myself. I have not completed any studies in archaeology or at least in history. My cousin is an archaeologist and in 2009 he suggested for me to join the archaeological expedition in Dubingiai castle site … After 2010 in the Dubingiai fieldwork I started to enjoy this activity generally and it became my hobby. Of course, I myself don't carry out any archaeological research, I only participate in it when only qualified archaeologists invite [me]. Thus, one can say that I have been involved with archaeology for almost 10 years, I have participated in more than 60 archaeological expeditions in Lithuania. (Marius)

Another administrator states that she developed a particular interest in archaeology throughout the years, motivated by an activist motivation to preserve cultural heritage:

> I'm a professional journalist with no relation with archaeology. I studied political science, and obtained a Master's degree in Islamic studies. … and I'm just a moderator. I mean, I haven't become wiser on the subject. … First I got involved with monuments and then I became interested. … I'd just returned from [a] journalist mission in Northern Greece … an area very rich in Ottoman monuments. … My motivation though then was not the intervention of the state for the renovation, but also [to] seek a public opinion in order to accept them as [a] part of our cultural heritage that is worth saving for Greece and the rest of the world. It was a kind of activism. And I never thought that this initiative would become very rich. (Irini)

In her story, Irini refers to incidental events which, in the light of her desire to support a more inclusive understanding of Greek cultural heritage, led her to become an active participant in the field. In Eleanore's case too, the decision to be active in moderating an archaeology-related Facebook page was a matter of a serendipitous encounter: 'It's a crazy story. … I think he is a monk, he is the admin. … He loves archaeology … and he found me and made me an admin. He put the group together … but since 2014 I am working on the page'.

However, most often the adoption of the role of Facebook administrator seems to come as the result of deliberate, premeditated planning. As Federico asserts, 'I have analysed a lot, and I have also compared myself with other Italian people who manage other pages similar to Archeoscavi, to understand which is the target, which is the recipient, and so on'. Marius, on the other side, indicates a desire to fulfil an unanswered public need as a motivation: 'There was a gap for a long time in the archaeology as a science and as a field activity, because almost nobody has been engaged in archaeological communication to the public. It was a niche, and I took advantage of it and set up this group'.

All study participants agreed that managing Facebook community is a valuable and rewarding experience, though their motivations to be involved in Facebook administration vary. Some saw it as a personal investment that may benefit their professional life. As described by Mindaugas, his Facebook page 'is my promotional space, where people can find me through Google and contact if they need any archaeological service'. Federico suggests as motivation that he wants to 'make myself known', or to benefit from 'maybe even the possibility of a future work for the archaeologist related also to communication', and 'also an opportunity for new contacts'. This opportunity to make

new contacts was also emphasized by other two admins, who suggested that ‘it has brought me closer to different groups of audiences’ (Zeta) and ‘new connections with people have appeared’ (Marius). In addition, administrators also see Facebook activity as a form of professional development, aimed at ‘increas[ing] my general knowledge of world archaeology and strengthen[ing] my summary skills’ (Zeta), of ‘widen[ing] my knowledge on the Greek history and history of Art’ (Irini), of ‘gain[ing] experience in managing social networks [and] understand[ing] what Internet users want’ and of ‘deepening my knowledge of archaeology and history’ (Marius).

In other cases, the reward to engage actively in Facebook activity is emotional, whereas the experiences are described as ‘interesting’, ‘satisfying’, a form of ‘pleasure’ or even of ‘love’. These emotional effects derive mainly from social interactions with people and the ability to connect with audiences through social network sites, whereby administrators state that ‘people contact us to congratulate us for our work and photos and encourage us to continue what we do with our page’ (Grigoria & Thea), or assert that ‘there is a pleasure you get when you see people engaging with it’ (Nicola). In other cases, emotional responses are motivated by values such as patriotism, as indicated by Eleanore’s assertion that ‘I love my country. I love my land. … I am very patriotic when it comes to archaeology of Israel’ (Eleanore), and Irini’s commitment to civic participation when she asserts that ‘I like volunteering. … This is great. This is enough for me. I meet people’ (Irini).

Metaphors on the role of administrator of archaeological Facebook sites

Based on an analysis of what administrators told us about their involvement with archaeological Facebook communities in the scoping interviews, we identified six conceptual metaphors related to the role of administrator: ADMIN IS A BROADCASTER, ADMIN IS A CONNECTOR, ADMIN IS A CURATOR, ADMIN IS AN EDUCATOR, ADMIN IS AN INFLUENCER and ADMIN IS AN OBSERVER. We introduced these metaphors as prompts in the focus group conversation, asking participants if they can identify themselves with one of them. None of the focus group participants identified with the notion of observer, even though many stated that they make an effort in monitoring the activity of community members as well as in tracking archaeological activity. We interpret this as an effect of the fact that administrators perceive themselves as taking an active role in managing Facebook communities and strive to be fully engaged in all aspects of community life, something in opposition to the passive role of observer.

In the ensuing open discussion, everyone agreed that it is hard to single out one role or identity, as usually administrators perform different roles at the same time. But in some cases, participants identified, either directly or through related metaphorical expressions, roles that from their individual experience stand out more prominently than others. For example, Zeta identifies herself as both a CURATOR and an EDUCATOR:

> I am mostly a *curator*. … I am *choosing what kind of news* I’m going to, like, share with the audience. … I try to *evaluate* what my audience would be more familiar or more interested in. So I am, like, *choosing from all the stuff* that we are uploading on our page and I am *choosing what’s good* for Facebook. And then I am *trying to educate* my audience, so my second job role would be an *educator*. So that they *have a general understanding on what’s going* on in Greece and the world … (Zeta)

When discussion turns into community members, Zeta continues emphasizing the importance of the administrator’s educational role, whereas knowledge transfer happens through user interactions:

> … also it’s a way to *educate* them somehow, because you can *suggest them what to do*. [The page] can be used as a source of *educating* an audience. So, a way to – kind of – agree to your main purpose, like *educating* them. So it can be a good thing. Sometimes quite tiring, but also a good thing. (Zeta)

In the case of another administrator, we also observed a fusion of different roles, related to prompted metaphors of BROADCASTER, CONNECTOR and EDUCATOR:

> In my experience as a Facebook page administrator on ArcheoScavi I *share* the content or *give some advice* to the people for [inaudible]. So I like to *give people some more specific information* about archaeology and the

> excavation, [a] live excavation, in particular to Sardinia. And *connected my page* and another page of Italian archaeologists, in particular 'Let's Dig Again'. (Federico)

Another focus group participant, Vendi, refers to herself explicitly as an influencer, a term often used in social media marketing (Enke and Borchers 2019). But, as she further asserts, creative work needed to post content on social media goes beyond this, pointing to a different, unprompted conceptual metaphor. Vendi refers specifically to the relationship between her Facebook page and the www.arheologija.hr website she had created in 2010, which, as she explains, was the *raison d'être* of being involved with Facebook in the first place. Facebook administrators such as herself, she states, 'do *set some examples*, which are later *followed*', pointing to a metaphor of ADMIN AS ROLE MODEL. But she also highlights her role in '*contributing to the design* of the [arheologija.hr] website', noting that for her it is very important that 'it looks good', and takes pride in the 'logo which *I created* in a form of Palaeolithic arrow, which is in a shape of cursor'. Vendi values being engaged in creative practice, an aspect of her admin work that she deems more valid and rewarding, suggesting that for her the ADMIN IS A CREATOR – a conceptual metaphor pointing to the fact that an archaeological Facebook site administrator is not only concerned about the informational aspect of content, but also about its creative originality, and aesthetics. The notion of social media as a space for creativity is, of course, not new: as argued by Gauntlett (2011), engagement on social media is a creative practice, and that Web 2.0 technologies offer a 'framework for participation' adopted for a diverse array of purposes beyond civic participation in decision-making:

> People use YouTube to communicate and connect, to share knowledge and skills, and to entertain. They use the community features of the site to support each other and engage in debates, and to generate the characteristics of a 'gift economy'. (Gauntlett 2011, p. 95)

In addition, an interesting debate developed about *expert* and *non-expert* roles of administrators, when participants started discussing whether expert knowledge is crucial in this kind of work. As conversation evolved, there was a lot of accommodation between all administrators on the issue, but it was clear that difference in norms between some of them persisted across other parts of the discussion. The argument unfolding the importance of involvement of professional archaeologists in public communication was shaped around knowledge, on the question if heritage specialists are an 'ideal' source of knowledge production. As Zeta argues, the 'really really important thing … is to be *knowledgeable*. Like, to be *an expert* on what they're writing. … The ideal Facebook admin for archaeology stuff or for heritage stuff should be *an archaeologist* or *a heritage specialist* or *an art specialist*'. On the other hand, Irini, who is not an archaeologist, seems to oppose this point of view, emphasizing social aspects of administrator's role: 'these are things that are *not only for academics*. I mean, they are *a concern of people* … this is not only for the monuments. It's also making *people* think about coexistence of different *people* on those times … Facebook is *people*'. Other participants supported both views emphasizing the hybridity of the site that shapes information flows. For example, on this issue, Federico noticed that he usually considers two types of content, 'posts both generic and specific, because [his] audience is made both by archaeologists and not'. Similarly, Vendi makes a distinction between two types of posts, 'those really professional and … meant for [a] specific audience' and 'other posts which are more related to [a] wider public'. She then adds that, in her experience, people find the latter kind of posts more likeable, because those written for a professional audience 'may be too specific'. But even if most administrators we talked to are archaeologists, even those with specialized knowledge and expertise tend to distance themselves from authoritative voice when they talk about their role as administrators: 'I'm not an official authority', notes Zeta, a PhD with expertise in Egyptology and many years of work experience in the Greek archaeological service, while Vendi – who also has a PhD in archaeology and works as a research associate at the University of Oxford – also notes when discussing her Facebook administrator work that 'we are just a couple of enthusiasts', alluding to

the fact that people involved in online archaeological communication are not paid for this kind of work.

Metaphors related to perceived functions of archaeological Facebook sites

We also sought to identify which metaphors do administrators employ to represent archaeological Facebook sites they are involved with, and thus how they conceive their functions. In the scoping interviews, we asked participants to characterize their Facebook site and to define its purpose. Their replies, based on functions of the Facebook page or group identified by participants in the scoping interviews, led us to identify initially five conceptual metaphors: FACEBOOK SITE AS A NEWS SERVICE, SITE AS A COMMUNICATION CHANNEL, SITE AS A BRIDGE, SITE AS AN ARCHIVE and SITE AS A FORUM.

A Facebook site being a NEWS SERVICE and a COMMUNICATION CHANNEL was the two most common metaphors mentioned by participants in the scoping interviews. The NEWS SERVICE metaphor points to an important function for many Facebook sites allowing users to share relevant and up-to-date information. As Nicola suggests, 'it's *sharing the knowledge and updates and information* that we are generating and are getting involved with', and Mindaugas agrees that 'the purpose [of the page] is that *information about archaeology could reach* Lithuanian people', adding that the content of his page is 'mostly information about Lithuanian archaeology and to some extent the most interesting *news* from abroad'. Other participants also acknowledge the importance of the site acting as a news service, pointing out its function for sharing '*news*, events, excavations, lectures … on Cypriot Archaeology' (Grigoria & Thea), '*relevant content* from somebody who wants to work in Aegean archaeology' (Nancy) and '*new ideas* for [a] thesis […] like sites that have been already excavated' (Eleanore).

The conceptual metaphor of the Facebook page or group as COMMUNICATION CHANNEL was also repeatedly brought up by participants, some mentioning it indirectly, 'to help *tell the world* about how wonderful and enriching the study of archaeology is' (Harry), and some directly: 'we meant [it] to be a *communication channel* for [those] interested in Aegean archaeology … we want people to be able to use a group *to communicate* to each other and also to find what is happening now' (Nancy); to share 'interests, actions, views and experiences on Cypriot Archaeology' (Grigoria & Thea); 'that's the channel where we can *converse* with those kinds of people and we want to … *share* our research with them, we want to make sure they *work* for us … we want *to engage* with these people' (Nicola). In a similar vein, when describing communication-related functions, Vendi points out to activities of *interacting, informing* and *collaborating,* realized through Facebook when she indicates that she tags articles on archaeological interest on Facebook '*to interac*t with and *inform* institutions which we *collaborate* with' (Vendi). Serving as a channel of communication, Facebook is claimed here to foster not only communication and dialogue, but also sharing, collaborative work, and engagement.

Another conceptual metaphor that emerged through the scoping interviews was the idea of a FACEBOOK SITE AS A BRIDGE that links information and digital objects with actors on the social network site: 'The second purpose is to set the means of *linking* information about these monuments with the Greek and international scholars and academics who are specialized and studied the subject' (Irini) or '[f]irst of all, [to] *bring* archaeology of Israel to a wide audience. … And every time I find something new in the small page, I can *bring it up* to [the] big audience' (Eleanore).

In some cases, summoning the conceptual metaphor of the FACEBOOK SITE AS A BRIDGE, administrators describe that the connection they foster is, first and foremost, between people: 'This group is *a bridge* between people coming from different backgrounds with a common interest, which is to discover, to find out elements of the common cultural heritage' (Irini), and the purpose of the site is 'to bring together a community of like-minded people' (Marius). Vendi emphasised that her Facebook page is a '*bridge between experts and people who are not experts*, but they are interested in the subject'. But in other cases, participants emphasize the role of the SITE AS A BRIDGE between people and different digital objects and sources of information: to connect users with 'scientific communication linked to archaeology and cultural heritage' (Federico), or 'to further promote posts from the website [arheologija.hr], and to publish direct links to other websites' (Vendi). Interestingly, one

administrator also alludes to an aspiration to create a bridge between people and physical heritage places, such as museums and archaeological sites: 'I think, [the] last … and most important point is to bring people to Israel. Come see what's going on here. Come see our museums. Come see our beautiful sites' (Eleanore).

In other cases, metaphorical expressions describing the function of Facebook community point to the pragmatic function of cultural preservation central to the conceptual metaphor of the FACEBOOK SITE AS AN ARCHIVE. Archival aspects of Facebook are mentioned by 3 out of 11 participants. For example, Irini directly asserts that her Facebook group is an archive, thus highlighting the importance to preserve relevant information: 'Because there is *a value of archive* for this group that no one wants to lose … So it's important *to keep the archive* for research reasons'. Two administrators talk about the function of collecting information also characteristic of the SITE IS AN ARCHIVE conceptual metaphor: as Federico says, 'I wanted to make a page that *collects information* on the Nuragic civilization and Sardinia, because I publish a lot on Sardinia being Sardinian', and, as Eleanore adds, 'the thing is first of all is *to bring, to collect everything* into one page'. The potential impact of social media on the archival practices of archaeology has been already acknowledged, raising sustainability concerns and fears that dependence on social media platforms to preserve archaeological evidence may lead to a new 'digital dark age' (Jeffrey 2012). Similar concerns are raised by Irini, when she relates an experience of how her Facebook group content was lost:

> Yes, we had problems. I mean, our group disappeared from Facebook, because of the report, because of hacking actually. Someone hacked the group and posted Jihadi slogans or whatever. We lost the group and its content for more than one month. … It was at the beginning of the 2016. I mean, after almost six years of operation. There is much valuable content in this group, and we don't have any backup on this, which is a big problem, so we lost all the content. And then we sent letters and press releases. I mean to the press, because we wanted the group. And we didn't know the reason. I mean, I discovered the reason when the group came back, because I saw these posts with Jihadi messages in Arabic. … I don't know how someone can avoid such a thing. Those initiatives are actually a risk. (Irini)

Finally, the notion of a FACEBOOK SITE AS A FORUM is mentioned directly by two participants. Talking about the Aegean archaeology Facebook page, Nancy suggests:

> We thought it would be a good *forum* to have not only notifications for conferences the news of archaeology but also a community where *people can post* finds and publications, they can *advertise* their work, as well as having an *exchange of ideas*. (Nancy)

In a similar vein, Irini says that the Ottoman Era Heritage of Greece Facebook 'group has become *a forum* that *involves* ordinary people who are interested in the subject with archaeologists, art historians and other scholars who have a speciality on it' (Irini). But other participants also claim, indirectly, that a Facebook site functions as an active site for user engagement and expression of ideas.

As noted, we introduced five metaphors elicited from scoping interviews as prompts in the focus group conversation: FACEBOOK SITE AS A NEWS SERVICE, COMMUNICATION CHANNEL, BRIDGE, ARCHIVE and FORUM. Administrator reactions support the idea that multiple metaphors are at play at the same time; some participants even stated explicitly that a Facebook site is 'all of these'. However, the very same people also highlighted and elaborated on specific metaphors. For example, Vendi asserted that her site www.arheologija.hr and 'Arheologija' Facebook page function as an ARCHIVE, because 'we are producing lots of our photographs and our articles', while Mindaugas explained that it is a COMMUNICATION CHANNEL, because it is 'the thing in the middle between the information and the society'.

Irini also noted that her group, leveraging the affordances of Facebook, is uniquely suited to support functions such as a news service and a forum because 'there is no such conference or something more on the subject', adding that the group is 'perhaps … the only forum on the Ottoman monuments of Greece' (Irini).

The focus group discussion also elicited four additional, unprompted site metaphors: SITE AS LABORATORY, SITE AS SIDEKICK, SITE AS BATTLEFIELD and SITE AS BALLET. The LABORATORY metaphor was elicited

from Vendi's thoughts about the administrator's creative efforts and how they play in favour of science, whereby the Facebook page is framed as 'a platform for *improving*' and 'a space where you can always *create* something … *different*' and '*combine creative design with science*' for the purpose of public communication. Another metaphor introduced by Vendi was the Facebook SITE AS A SIDEKICK, in other words, a supplementary tool meant to support something of primary importance which has been established already. She articulates the idea that her Facebook page was created as a '*sidekick* for [the Arheologija.hr] website', where she could '*add additional* content, which we didn't want to put on the website'. In this, Facebook seems to be perceived not just as an instrumental mode of communication but also as a vehicle to provide additional content that enables different ways of archaeological representation.

The SITE AS A BATTLEFIELD and SITE AS A BALLET metaphors, on the other hand, initially appeared in Irini's talk about her Facebook group on the Ottoman era monuments in Greece, which was created as a social initiative focused on the rescue of Ottoman heritage, a somewhat controversial and even politicized subject in Greece. The BATTLEFIELD metaphor privileges an understanding of participation in the life of a Facebook group not as a purely creative effort, but as demanding work connected with social activism, as the group becomes the arena for a campaign against heritage decay: '*activism,* because … one of the reasons by this group has been created is the preservation of the monuments … we have *taken many actions* related to this' (Irini). In this case, the reference to what happens in an active Facebook group conceived as a BATTLEFIELD underlines the more general phenomenon of how social media platforms operate as agonistic fields (Mouffe 1999) of contestation, connected with additional questions of weaponization of information, echo chambers and symbolic conflict online. As Irini notes, '[s]ome people find [the group] as *a field* to express their *opinions on politics* or the *Greek-Turkish conflicts* and things like this'.

At the same time, in describing challenges an administrator is facing in managing conflict, Irini, elaborating on the notion of the administrator acting as a mediator between different group members, articulates the metaphor of the Facebook SITE AS A BALLET, invoking a representation of the life of the administrator as a performative act:

> It's a very *demanding* work … You have to *contribute*, to encourage people = *members –contributing*, to solve problems, conflicts, and *to act* as a bridge … It's like a *ballet* or some kind of a *ballet*. You have too many *roles,* and at the same time you have to be very *careful* and a very *dedicated*, and *encouraging*, and *open minded*, and sometimes *strict*. It's *difficult*, it's *not something simple* to support such an initiative. (Irini)

In this case, the site as a ballet metaphor appears in tandem with the notion of the role of the admin as a bridge. But attributes attached to the role of the administrator – *careful, dedicated, encouraging, strict* – might well be applied to a conception of the ADMIN AS A CHOREOGRAPHER, orchestrating user interactions and maintaining balance between opposing views on social network sites, especially when it concerns topics of dissonant or difficult heritage.

Finally, one of the most notable exchanges within the focus group conversation concerned the difference between Facebook pages and groups. This debate gave rise to two polar metaphors, offered to characterize pages and groups respectively. From metaphorical expressions introduced by focus group participants, a Facebook page could be characterized as a BUILDING, whereby the community of followers is understood as something to be built or to be constructed:

> I need … *to build* a community, *to build* some group of people with whom I can share everything that's interesting for me and possibly to them. … and we just have *to build* it *bigger* and *stronger* communities and to show the people how beautiful the archaeology can be. (Mindaugas)

Mindaugas' archeologas.lt Facebook page represents his blog and serves as his personal space for archaeological dissemination and self-promotion. The PAGE AS A BUILDING metaphor he elicits reflects more the constructive nature and strenuous effort required to build the page, and community, as an edifice –usually the case with Facebook pages requiring more careful, gradually deployed and strategic moderation – than a reference to archaeological content related to buildings.

In juxtaposition to the PAGE AS A BUILDING metaphor, a Facebook group was represented by Irini as an ORGANISM, a living system consisting of evolving, interdependent members and resources that live together: 'Groups are different kind of nature, because when you *create* a group it's *living* its own *life* and you are just part of it' (Irini). The juxtaposition between Facebook GROUP AS AN ORGANISM and Facebook PAGE AS A BUILDING is related to the diverging functions of these two kinds of Facebook sites, whose communicative performativity is defined by their different technological affordances governed by social media logic (van Dijck and Poell 2013).

Discussion

Accrual of social capital, both bridging and bonding (Coleman 1988), seems to be a central factor underlying motives to be involved in participatory archaeological practice, which supports multiple metaphors of ADMINISTRATOR AS BROADCASTER, CONNECTOR, CURATOR, EDUCATOR, INFLUENCER and the unprompted metaphor of CREATOR. Usually, administrators do not position themselves in one role, but tend to indicate that they perform mixed roles. However, it is clear from the administrators' sayings that certain combinations of roles stand out more prominently, depending on the administrator's preferences for particular kinds of content and style of moderation. Contradicting views expressed in the focus group discussion, such as in debating the relative importance of expert vs. non-expert knowledge, also reflect different perceptions and individual conceptions on what Facebook should be for in archaeology. Despite differences, however, there was much agreement between participants representing both professional archaeologists and archaeology enthusiasts interested in archaeology. In this, it appears that archaeological Facebook sites are considered as 'boundary' zones, acting as 'creolized peripheral spaces' where two principal (professional, and non-professional) archaeological 'semiospheres' and approaches to archaeological communication interact fruitfully (Lažikas et al. 2018; cf. Lotman 1990).

Even though some metaphors and related community functions reveal a particular kind of analogical correspondence or 'institutional isomorphism' (DiMaggio and Powell 1983) between conceptualizations of Facebook sites and heritage institutions – for instance, those identifying the SITE AS AN ARCHIVE or as a FORUM (Cameron 1971) – others seem to derive from source domains outside the heritage institutional realm. These are used to reveal an important distinction between groups and pages, exemplified by the characterization of a Facebook GROUP AS AN ORGANISM, vs a PAGE AS A BUILDING, suggesting that it is the relevance of the different functional affordances between Facebook pages and groups rather than the role of administrator that is the determining factor for their conceptualization. Indeed, the function of Facebook groups is conceived as different from pages, given their symmetric content creation and curation model. The notion of the PAGE AS A BUILDING points directly to the agency of the administrator as a Facebook page and content CREATOR, and CURATOR, and to the page itself as a curated, and therefore stable and ordered, manifestation of this agency; this corresponds to what Hogan (2010) identifies as Facebook's 'exhibition' function, while his notion of Facebook as 'performance' is reflected in the FACEBOOK SITE AS A BALLET metaphor. Conversely, the ecological metaphor of ORGANISM foregrounds the organic, and thus dynamic and evolving, nature of Facebook groups as understood by participants to our study. Furthermore, the juxtaposition between metaphors of BALLET and BATTLEFIELD points to two different conceptions about the function of social media communities as sites of civic communication and participation. FACEBOOK SITE AS BALLET represents a stage of harmonious communicative action, much like the choreographed interactions between flight pilots and aircraft instrumentation posited by Ed Hutchins in his emblematic account of *distributed cognition* in action (Hutchins 1995); beyond that, it alludes to a public sphere of deliberative democracy (Habermas 1996) where members engage in well-coordinated communication enabled by Facebook platform affordances of replying, liking and sharing to affirm the rationality and legitimacy of archaeological knowledge and produce benign effects of learning, participation and community-building. Conversely, the BATTLEFIELD metaphor points to Facebook as a place of conflict which, according to Facebook administrators participating in our

study, far from enabling a kind of agonistic pluralism (Mouffe 1999) towards multiple and open interpretations of archaeology, may also produce toxic effects of misuse of archaeological knowledge and political weaponization of the past.

Manifestations of conceptual metaphors in the sayings of administrators who took part in our study indicate that they ascribe diverse functions to Facebook sites. Some are related to one-way, broadcasting-like communication, manifested in metaphors such as NEWS SERVICE and COMMUNICATION CHANNEL. In complement with these metaphors, the SITE AS ARCHIVE metaphor elicits a function of Facebook sites as places of 'curation in the wild' (Dallas 2015), reflecting to some extent but also subverting the traditional authority of heritage institutions as sole custodians of heritage resources and knowledge. On the other hand, the manifestation of conceptual metaphors of BRIDGE, FORUM, LAB, MOVEMENT, BATTLEFIELD and BALLET indicates that Facebook administrators who took part in our study value and conceptualize participatory, reciprocal ways of interaction between archaeological communities. Nevertheless, this expression of participatory Facebook site functions appears in tandem with other, non-participatory metaphors, and thus it would be wrong to conclude that archaeological grassroots communities on Facebook are considered universally as participatory. Based on this creolization between different metaphors, and ideas on Facebook site content and functions held by archaeological Facebook administrators in our study, we could not replicate the separation between distinct 'marketing', 'inclusivity', and 'collaborative' frames observed by Kidd (2011) in her analysis of institutional museum communication on social media. As represented in the sayings of study participants, archaeological Facebook communities seem to incorporate aspects of marketing, inclusion and collaboration to create a hybrid, creolized frame for communication at the boundary between professional and non-professional archaeological semiospheres (Laužikas et al. 2018).

Conclusion

Self-representations of archaeological Facebook site administrators, and elicited metaphors on Facebook and their role as administrators, offer interesting broader insights into contemporary debates on digital public archaeology. Participants in our study are highly aware of the positive contribution of Facebook as a means of providing timely information and reliable knowledge on archaeology to both archaeologists and broader communities, and also as a potential instrument for building archaeological and archaeology-related communities. In tandem, they recognize that their involvement with managing archaeological Facebook sites is driven both by a desire to contribute to values such as the dissemination of reliable archaeological knowledge and protection of archaeological heritage through activism, and, in most cases, by expectations of expanded networks and improved status within the community and career benefits. However, while we would expect to elicit issues prominent in recent English-speaking scholarship in the developed world as regards archaeological communication on social media, such as unpaid digital labour (Walker 2014a; Perry and Beale 2015), online harassment and abuse (Richardson 2018; Cook 2019), post-colonial inequity legacies (Morgan and Pallascio 2015) and systemic racism (Flewellen et al. 2021), we found no representations of such issues in conversations with participants to our study. This is despite the fact that we explicitly asked them questions on what constitutes appropriate or inappropriate behaviour on Facebook, on incidents of failure or crisis in their Facebook experience, and on their personal motivations and concerns as mostly volunteer contributors to online work. Instead, they pointed to a different range of dangers in public archaeological communication, which they view as most acutely experienced on social network sites such as Facebook: the unchecked proliferation of unscientific pseudo-archaeological 'facts', as well as the weaponization of the archaeological past for political purposes, especially by fundamentalist and extremist ideologies and groups. It is no accident that several participants in our study come from areas of Europe that have experienced, or are currently experiencing, such phenomena in ways perhaps invisible to dominant critical discourses in the field. We consider this a relevant insight for public archaeology, especially in the context of the increasing

pseudo-scientific use of the past to support neo-imperialist, xenophobic, and authoritarian ideologies and actions (Edele 2017; Yavuz 2020).

A further salient dimension for praxis in the field of public archaeology emerges from the distinction we identified between metaphors of a FACEBOOK SITE AS BATTLEFIELD vs. BALLET. The two metaphors point to different axial visions: the former of public archaeology as an agonistic frontier, where the archaeological record and knowledge about the past is a mediating tool for confrontation between opposed, and likely incommensurable (Stump 2013), knowledge regimes and identities; and the latter of a contact zone (Clifford 1997), where dominant and subaltern discourses and groups – including those of professional archaeologists and diverse communities – engage with archaeological evidence and knowledge in mutually respectful reciprocal exchange. An additional axis arises from the opposition between top-down, one-way archaeological communication, manifested in metaphors such as NEWS SERVICE and COMMUNICATION CHANNEL, and participatory, reciprocal, networked communication congruent with metaphors such as BRIDGE and FORUM. While, in practice, agonistic and deliberative aspects co-exist to some extent, and while institutional communication on social media is inseparable from community interaction, the dilemmas posed by these oppositions are not without meaning in the context of the contemporary politics of critical public archaeology.

By analysing conversations with Facebook administrators, we found that archaeological communication work they perform on social network sites is not driven merely by instrumental parameters. We mapped metaphorical expressions used by study participants in scoping interviews and focus group conversation to key underlying conceptual metaphors, which represent important cognitive schemata about Facebook pages and groups and administrators' role in managing them. Meanings related to administrator motivations, roles and activities reveal engagement with archaeological resources and knowledge, but also awareness of how productive effort and involvement in the life of archaeological Facebook sites may contribute to increased social capital and, in some cases, reduced precarity and enhanced professional status of administrators within the archaeological community. Conceptual metaphors applied by Facebook administrators in our study point to multiple perceived functions and values, but these do not relate specifically to archaeology; in fact, no single metaphorical expression underlying the many conceptual metaphors we identified comes from a strictly archaeological context. Instead, while applicable to archaeological information curation and dissemination, and even more so to community building between archaeologists and broader communities, metaphors elicited in our study are applicable more to the communicative functions and processes public archaeology shares with other fields of online cultural communication. They reflect underlying factors relevant to the practice of setting up and managing archaeological social network communities, offering insights on how cognition interacts with action in the work of Facebook administrators, and revealing relevant dimensions on the role of administrator and on the function of online communities contributing more broadly to contemporary public archaeology.

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References

Almansa Sánchez, Jaime. 2013. "To Be or Not to Be? Public Archaeology as a Tool of Public Opinion and the Dilemma of Intellectuality." *Archaeological Dialogues* 20 (1): 5–11. doi:10.1017/S1380203813000044.

Atalay, Sonya. 2012. *Community-Based Archaeology: Research with, by, and for Indigenous and Local Communities. Community-Based Archaeology*. University of California Press. doi:10.1525/9780520953468.

Axelsen, Irmelin. 2018. "Digital Archaeology. A Democratic Utopia." *Nordisk Museologi* 2–3: 107–107. doi:10.5617/nm.6658.

Beale, Nicole, and Jessica Ogden. 2012. "Social Media at the CAA2012: A Reflective Report." *Internet Archaeology* 32. doi:10.11141/ia.32.6.

Bonacchi, Chiara. 2017. "Digital Media in Public Archaeology." In *Key Concepts in Public Archaeology*, edited by Gabriel Moshenska, 60–72. UCL Press. doi:10.2307/j.ctt1vxm8r7.9.

Bonacchi, Chiara. 2022. *Heritage and Nationalism*. London: UCL Press. doi:10.14324/111.9781787358010.

Bonacchi, Chiara, Mark Altaweel, and Marta Krzyzanska. 2018. "The Heritage of Brexit: Roles of the Past in the Construction of Political Identities through Social Media." *Journal of Social Archaeology* 18 (2): 174–192. doi:10.1177/1469605318759713.

Bonacchi, Chiara, and Areti Galani. 2013. "Culturally Engaged? A People-Centred Approach to Understanding Digital Cultural Engagement on Social Media Platforms." Report. Newcastle upon Tyne: Newcastle University. https://www.stir.ac.uk/research/hub/publication/876900.

Brown, Deidre, and George Nicholas. 2012. "Protecting Indigenous Cultural Property in the Age of Digital Democracy: Institutional and Communal Responses to Canadian First Nations and Māori Heritage Concerns." *Journal of Material Culture* 17 (3): 307–324. doi:10.1177/1359183512454065.

Cameron, Duncan F. 1971. "The Museum, a Temple or the Forum." *Curator: The Museum Journal* 14 (1): 11–24. doi:10.1111/j.2151-6952.1971.tb00416.x.

Childress, James F., Eric M. Meslin, and Harold T. Shapiro, eds. 2005. *Belmont Revisited: Ethical Principles for Research with Human Subjects*. Washington, DC: Georgetown University Press.

Clifford, James. 1997. *Routes: Travel and Translation in the Late Twentieth Century*. London: Harvard University Press.

Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94. Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure: S95–S120.

Colley, Sarah. 2014. “Social Media and Archaeological Communication: An Australian Survey.” *Archäologische Informationen* 36: 65–80. doi:10.11588/ai.2013.0.15385.

Cook, Katherine. 2019. “EmboDIYing Disruption: Queer, Feminist and Inclusive Digital Archaeologies.” *European Journal of Archaeology* 22 (3): 398–414. doi:10.1017/eaa.2019.23.

Dallas, Costis. 2015. “Curating Archaeological Knowledge in the Digital Continuum: From Practice to Infrastructure.” *Open Archaeology* 1 (1). doi:10.1515/opar-2015-0011.

Dallas, Costis. 2018. “Heritage Encounters on Social Network Sites, and the Affiliative Power of Objects.” In *Culture and Perspective at Times of Crisis: State Structures, Private Initiative and the Public Character of Heritage*, edited by Polina. Oxford, UK: Oxbow Books. doi:10.5281/zenodo.1034085.

De Man, Adriaan, and Cristiana Oliveira. 2016. “A Stakeholder Perspective on Heritage Branding and Digital Communication.” In *Tourism and Culture in the Age of Innovation*, edited by Vicky Katsoni, and Anastasia Stratigea, 447–455. Springer Proceedings in Business and Economics. Springer International Publishing.

Delgado Anés, Lara, Pablo Romero Pellitero, and Lorna-Jane Richardson. 2017. “Virtual Archaeology through Social Networks. The Case of the 1st Public Archaeology Twitter Conference.” In *Virtual Archaeology through Social Networks. The case of the 1st Public Archaeology Twitter Conference*, edited by Nuria Rodriguez Ortega, 293–98. Malaga: Sociedad Internacional Humanidades Digitales Hispánicas. https://ueaeprints.uea.ac.uk/id/eprint/69007/.

Dennis, L. Meghan. 2020. “Digital Archaeological Ethics: Successes and Failures in Disciplinary Attention.” *Journal of Computer Applications in Archaeology* 3 (1): 210–218. doi:10.5334/jcaa.24.

Dijck, Jose van. 2013. *The Culture of Connectivity: A Critical History of Social Media*. New York: Oxford University Press.

Dijck, José van, and Thomas Poell. 2013. “Understanding Social Media Logic.” *Media and Communication* 1 (1): 1–14. https://papers.ssrn.com/abstract=2309065. doi:10.17645/mac.v1i1.69.

DiMaggio, Paul J., and Walter W. Powell. 1983. “The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields.” *American Sociological Review* 48 (2): 147–160. doi:10.2307/2095101.

Edele, Mark. 2017. “Fighting Russia’s History Wars: Vladimir Putin and the Codification of World War II.” *History and Memory* 29 (2): 90–124. doi:10.2979/histmemo.29.2.05.

Enke, N., and N. S. Borchers. 2019. “Social Media Influencers in Strategic Communication: A Conceptual Framework for Strategic Social Media Influencer Communication.” *International Journal of Strategic Communication* 13 (4): 261–277. doi:10.1080/1553118X.2019.1620234.

Flewellen, Ayana Omilade, Justin P. Dunnavant, Alicia Odewale, Alexandra Jones, Tsione Wolde-Michael, Zoë Crossland, and Maria Franklin. 2021. “‘The Future of Archaeology Is Antiracist’: Archaeology in the Time of Black Lives Matter.” *American Antiquity* 86 (2): 224–243. doi:10.1017/aaq.2021.18.

Gauntlett, David. 2011. *Making Is Connecting*. Cambridge: John Wiley & Sons.

Giaccardi, Elisa, ed. 2012. *Heritage and Social Media: Understanding Heritage in a Participatory Culture*. 1st ed. New York: Routledge.

Gibbs, Raymond W. 2011. “The Social Nature of Embodied Cognition: A View from the World of Metaphor.” *Intellectica* 56 (2): 81–98. doi:10.3406/intel.2011.1148.

Goffman, E. 1959. *The Presentation of Self in Everyday Life*. New York: Doubleday.

Habermas, Jürgen. 1996. “Three Normative Models of Democracy.” In *Democracy and Difference: Contesting the Boundaries of the Political*, edited by Seyla Benhabib, 21–30. Princeton, NJ: Princeton University Press.

Hagmann, Dominik. 2018. “Reflections on the Use of Social Networking Sites as an Interactive Tool for Data Dissemination in Digital Archaeology.” *Interdisciplinaria Archaeologica* 9 (1): 7–20. doi:10.24916/iansa.2018.1.1.

Harding, Sandra. 1995. “‘Strong Objectivity’: A Response to the New Objectivity Question.” *Synthese* 104 (3): 331–349. https://www.jstor.org/stable/20117437. doi:10.1007/BF01064504.

Haukaas, Colleen, and Lisa M. Hodgetts. 2016. “The Untapped Potential of Low-Cost Photogrammetry in Community-Based Archaeology: A Case Study from Banks Island, Arctic Canada.” *Journal of Community Archaeology & Heritage* 3 (1): 40–56. doi:10.1080/20518196.2015.1123884.

Hogan, Bernie. 2010. “The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online.” *Bulletin of Science, Technology & Society* 30 (6): 377–386. doi:10.1177/0270467610385893.

Holland, Dorothy, and William Lachicotte. 2007. “Vygotsky, Mead, and the New Sociocultural Studies of Identity.” In *The Cambridge Companion to Vygotsky,* edited by H. Daniels, J. V. Wertsch, and M. Cole, 1st ed., 101–35. Cambridge: Cambridge University Press. https://doi.org/10.1017/CCOL0521831040.005.

Hutchins, Ed. 1995. “How a Cockpit Remembers Its Speeds.” *Cognitive Science* 19 (3): 265–288. doi:10.1207/s15516709cog1903_1.

Huvila, Isto. 2014. “Engagement Has Its Consequences: The Emergence of the Representations of Archaeology in Social Media.” *Archäologische Informationen* 36: 21–30. doi:10.11588/ai.2013.0.15382.

Jeffrey, Stuart. 2012. “A New Digital Dark Age? Collaborative Web Tools, Social Media and Long-Term Preservation.” *World Archaeology* 44 (4): 553–570. doi:10.1080/00438243.2012.737579.

Kansa, Eric C., Sarah Whitcher Kansa, and Ethan Watrall. 2011. “Archaeology 2.0: New Approaches to Communication and Collaboration.” *Cotsen Digital Archaeology Series*, January. http://escholarship.org/uc/item/1r6137tb.

Kelpšienė, Ingrida. 2019. “Exploring Archaeological Organizations’ Communication on Facebook: A Review of MOLA’s Facebook Page.” *Advances in Archaeological Practice* 7 (2): 203–214. doi:10.1017/aap.2019.9.

Kidd, Jenny. 2013. "Enacting Engagement Online: Framing Social Media Use for the Museum." *Information Technology & People*, April. doi:10.1108/09593841111109422.

Kövecses, Zoltán. 2015. *Where Metaphors Come from: Reconsidering Context in Metaphor*. Oxford: Oxford University Press.

Kuckartz, Udo. 2014. *Qualitative Text Analysis: A Guide to Methods, Practice & Using Software*. Los Angeles: SAGE.

Lakoff, George. 1993. "The Contemporary Theory of Metaphor." In *Metaphor and Thought*, edited by Andrew Ortony, 202–251. New York: Cambridge University Press.

Laracuente, Nicolas R. 2016. "Public Archaeology 2.0: Facilitating Engagement with Twitter." *AP: Online Journal in Public Archaeology* 2: 81–99. doi:10.23914/ap.v2i0.15.

Lažikas, Rimvydas, Costis Dallas, Suzie Thomas, Ingrida Kelpšienė, Isto Huvila, Pedro Luengo, Helena Nobre, Marina Toumpouri, and Vykintas Vaitkevičius. 2018. "Archaeological Knowledge Production and Global Communities: Boundaries and Structure of the Field." *Open Archaeology* 4 (1): 350–364. doi:10.1515/opar-2018-0022.

Lindlof, Thomas R. 2008. "Idiographic vs Nomothetic Science." In *The International Encyclopedia of Communication*. John Wiley & Sons, Ltd. doi:10.1002/9781405186407.wbieci005.

Lotman, Yuri. 1990. *Universe of the Mind: A Semiotic Theory of Culture*. Bloomington and Indianapolis: Indiana University Press.

Marakos, Panteleimon. 2014. "Museums and Social Media: Modern Methods of Reaching Wider Audiences." *Mediterranean Archaeology and Archaeometry* 14 (4): 75–81. doi:10.5281/zenodo.13707.

Matthews, Jacqueline, and Lynley Wallis. 2015. "Broadcasting, Listening and the Mysteries of Public Engagement: An Investigation of the AAA Online Audience." *Australian Archaeology* 81 (1): 1–11. doi:10.1080/03122417.2015.11682060.

Morgan, Colleen, and Stuart Eve. 2012. "DIY and Digital Archaeology: What Are You Doing to Participate?" *World Archaeology* 44 (4): 521–537. doi:10.1080/00438243.2012.741810.

Morgan, Colleen, and Pierre Marc Pallascio. 2015. "Digital Media, Participatory Culture, and Difficult Heritage: Online Remediation and the Trans-Atlantic Slave Trade." *Journal of African Diaspora Archaeology and Heritage* 4 (3): 260–278. doi:10.1080/21619441.2015.1124594.

Morris, James. 2011. "Zoobook: Archaeologists Connecting through Social Media." *The SAA Archaeological Record* 11 (1): 30–32. https://www.academia.edu/373517/Zoobook_Archaeologists_Connecting_through_Social_Media.

Moser, Stephanie, Darren Glazier, James E. Phillips, Lamya Nasser el Nemr, Mohammed Saleh Mousa, Rascha Nasr Aiesh, Susan Richardson, Andrew Conner, and Michael Seymour. 2002. "Transforming Archaeology through Practice: Strategies for Collaborative Archaeology and the Community Archaeology Project at Quseir, Egypt." *World Archaeology* 34 (2): 220–248. doi:10.1080/0043824022000007071.

Mouffe, Chantal. 1999. "Deliberative Democracy or Agonistic Pluralism?" *Social Research* 66 (3): 745–758. http://www.jstor.org/stable/40971349.

Musolff, Andreas. 2017. "Metaphor and Cultural Cognition." In *Advances in Cultural Linguistics*, edited by Farzad Sharifian, 325–344. Singapore: Springer.

Ortman, Scott G. 2000. "Conceptual Metaphor in the Archaeological Record: Methods and an Example from the American Southwest." *American Antiquity* 65 (4): 613–645. doi:10.2307/2694419.

Parks, Malcolm R. 2010. *'Social Network Sites as Virtual Communities.' In A Networked Self, 105–23*. London, UK: Routledge.

Patania, Ilaria, and Yitzchak Jaffe. 2018. "Eating Archaeology: Experimenting with Food in Public Outreach." *Public Archaeology*, November. https://www.tandfonline.com/doi/abs/10.108014655187.2018.1510361.

Perry, Sara, and Nicole Beale. 2015. "'The Social Web and Archaeology's Restructuring: Impact, Exploitation, Disciplinary Change.'." *Open Archaeology* 1 (1). doi:10.1515/opar-2015-0009.

Perry, Sara, Lucy Shipley, and Jim Osborne. 2015. "Digital Media, Power and (In)Equality in Archaeology and Heritage." *Internet Archaeology* 38. doi:10.11141/ia.38.4.

Pett, D. 2012. "Use of Social Media Within the British Museum and the Museum Sector." In *Archaeology and Digital Communication: Towards Strategies of Public Engagement*, edited by C. Bonacchi, 83–102. London, UK: Archetype Publications. http://www.archetype.co.uk/publication-details.php?id=155.

Restivo, Sal, and Jennifer Croissant. 2008. "Social Constructionism in Science and Technology Studies." In *Handbook of Constructionist Research*, edited by James A. Holstein, and Jaber F. Gubrium, 213–229. New York: Guilford Press.

Richardson, Lorna. 2012. "Twitter and Archaeology: An Archaeological Network in 140 Characters or Less." In *Archaeologists and Digital Communication*, edited by Chiara Bonacchi, 15–24. London: Archetype. https://archetype.co.uk/our-titles/archaeology-and-digital-communication/?id=155.

Richardson, L. J. 2014. "Understanding Archaeological Authority in a Digital Context." *Internet Archaeology* 38: 8. doi:10.11141/ia.38.1.

Richardson, Lorna-Jane. 2015. "Qualitative and Quantitative Data on the Use of the Internet for Archaeological Information." *Journal of Open Archaeology Data* 4. doi:10.5334/joad.ag.

Richardson, Lorna-Jane. 2018. "Ethical Challenges in Digital Public Archaeology." *Journal of Open Archaeology Data* 1 (1): 64–73. doi:10.5334/joad.ag.

Rocks-Macqueen, Doug. 2016. "Digital Public Engagement through Social Media in Archaeology – How to Choose." *Present Pasts* 7 (1): 1. doi:10.5334/pp.62.

Schmitt, Rudolf. 2005. “Systematic Metaphor Analysis as a Method of Qualitative Research.” *The Qualitative Report* 10 (2): 358–394. doi:10.46743/2160-3715/2005.1854.

Stump, Daryl. 2013. “On Applied Archaeology, Indigenous Knowledge, and the Usable Past.” *Current Anthropology* 54 (3): 268–298. doi:10.1086/670330.

Talja, Sanna, Kimmo Tuominen, and Reijo Savolainen. 2005. “‘Isms’ in Information Science: Constructivism, Collectivism and Constructionism.” edited by Birger Hjørland. *Journal of Documentation* 61 (1): 79–101. doi:10.1108/00220410510578023.

Tarlow, Sarah, and Liv Nilsson Stutz. 2013. “Can an Archaeologist Be a Public Intellectual?” *Archaeological Dialogues* 20 (1): 1–5. doi:10.1017/S1380203813000032.

Wakefield, Christopher. 2020. “Digital Public Archaeology at Must Farm: A Critical Assessment of Social Media Use for Archaeological Engagement.” *Internet Archaeology* 55 (October). doi:10.11141/ia.55.9.

Walker, Dominic. 2014a. “Decentering the Discipline? Archaeology, Museums and Social Media.” *Online Journal in Public Archaeology* 4: 77–102. doi:10.23914/ap.v4i0.44.

Walker, Dominic. 2014b. “Antisocial Media in Archaeology?” *Archaeological Dialogues* 21 (2): 217–235. doi:10.1017/S1380203814000221.

Whitcher Kansa, Sarah, and Francis Deblauwe. 2011. “User-Generated Content in Zooarchaeology: Exploring the “Middle Space” of Scholarly Communication.” In *Archaeology 2.0: New Approaches to Communication and Collaboration*, edited by Eric C. Kansa, Sarah Whitcher Kansa, and Ethan Watrall, 185–206. Los Angeles: The Cotsen Institute of Archaeology Press.

Williams, Howard, and Alison Atkin. 2015. “Virtually Dead: Digital Public Mortuary Archaeology.” *Internet Archaeology* 40 (November). doi:10.11141/ia.40.7.4.

Yavuz, M. Hakan. 2020. *Nostalgia for the Empire: The Politics of Neo-Ottomanism*. Oxford: Oxford University Press.