

Balancing situated and objective representations in archaeological fieldwork

November 20, 2024

Abstract

Archaeology comprises both systematic and improvised attitudes and processes concerned with the collection and maintenance of data. This reflects the need to obtain formally-defined data, while also grappling with the fuzzy and uncertain nature of archaeological encounters, especially in fieldwork environments. This produces an epistemic tension, whereby archaeologists struggle to reconcile their desire to produce concrete outcomes based on objective facts, and their intuitive understanding that data are in fact products of situated decisions and actions. Through observations of archaeological practices, interviews with archaeologists at work, and analysis of the documents they produced while recording objects of archaeological concern, this paper articulates how archaeologists cope with this tension and integrate it into their work experiences.

Keywords: data work; documentation; collaborative experiences

Introduction

The series of challenges pertaining to the organization, sharing and reuse of archaeological data, which are often collectively referred to as the discipline’s “curation crisis” or “data deluge”, have highlighted the wide array of practices that underlie data’s construction, management, dissemination and reuse (Bevan 2012; Huggett 2022b, 2022a). Numerous studies have complicated the common imagination of data – which considers them as concise, corpuscular, discrete and inherently truthful records – by demonstrating how, in practice, they are actually messy, incomplete and non-reductive (cf. Huggett 2022a; Voss 2012; Dallas 2015; Batist 2024). In fact, archaeologists create data while anticipating their utility as records that inform certain kinds of analysis, while those who apply data in analytical contexts simultaneously reconcile their own use-cases with the conditions under which the data were originally created (Dallas 2015: 190-191).

This is reflected in the ways in which archaeologists reuse data. Faniel et al. (2013) and Atici et al. (2013) documented how those who reuse data seek out additional contextual information about the circumstances of a dataset’s creation by communicating directly with

the dataset's originators, thereby establishing a discursive collaborative tie. Alternatively, many data analysts who operate at a distance from the contexts in which data originate prefer to trust in the models that give the data concrete structure, thereby offloading the acts of reconciliation to those who produced the data (Huggett 2022b). In other words, reusing data involves establishing trust, which can be garnered through mutual understanding of the challenges that had to be overcome to get observations to fit within discrete data structures, or through reliance on mechanisms of control to ensure that data are collected and maintained in a consistent manner.

This paper demonstrates some of the strategies employed to establish trust in data. Through analysis of one illustrative example of archaeological documentation in fieldwork, I show how data-capture is not merely a sensory experience whereby nature is recorded on a 1:1 basis, but is in fact structured by models and power relations that legitimize data and make them useful.

Background

This work builds upon prior studies of archaeological documentation in fieldwork settings, particularly Edgeworth's (1991: 28) dissertation that documented "the transaction between the subject and the object, as it takes place in the act of discovery," which represented an attempt to ground theoretical discourse concerning the objectivity of the archaeological record in the practical "intersubjective work or labour upon material objects". This extremely polyvalent work touched on various aspects of archaeological practice, highlighting the collective and discursive process of archaeological knowledge production in various settings. Edgeworth closely examined the physical acts of excavation, the mindsets of the people doing this work, the sensory and conceptual apparatus through which objects are uncovered and made meaningful, and the social transactions that surround and permeate life on the project. His work drew attention to the social and professional interactions taking place at an archaeological excavation, and which occur as archaeologists articulate an object as a meaningful or discrete entity and make it official. Crucially, Edgeworth highlighted how archaeological records are produced through improvised, semi-structured and discursive action, afforded by practical concern and limited by the prior experiences held by those doing the work.

Similarly, Goodwin (1994, 2010) observed how the formation of concrete records in fieldwork settings relates to the establishment of professional frameworks, which lend authoritative legitimacy to the meanings that archaeologists eventually settled upon. This touched on similar observations made by Gero (1996), who noted how certain ways of delimiting features – which corresponded with gendered experiences – were deemed more legitimate than others. Mickel (2021) and Yarrow (2008) also showed a strong relationship between the diminished interpretative agency among archaeological labourers (including local labourers and undergraduate students) and their inability to contribute tangible and meaningful documentary records about the things they recover.

Thorpe (2012) also argued that the broader social and political circumstances – neoliberal austerity, in particular – in which archaeological fieldwork tends to operate significantly

effects how interpretations are made and arguments are extended, by effectively curtailing fieldworkers' creative agency. Huggett (2022b), Caraher (2019), Batist et al. (2021), and Batist ([In review](#)) similarly draw attention to how digital workflows effectively segregate acts of recording from acts of analysis and interpretation, by putting significant epistemic distance between those who hold creative agency in analytical and interpretive domains and those who occupy the domain of fieldwork; they further demonstrate how the latter is leveraged by the former to produce a clear and concise basis upon which formal analytical methods rest. Moreover, Batist (2024) and Hacıgüzeller, Taylor, and Perry (2021) point out that the formal and transactional paradigm that dominates discourse on what data are and how they should be handled poses problems for communicating what was actually encountered while excavating a feature, including tentative thoughts, desires and apprehensions that are left out of official records.

In what follows, I will extend this critique by showcasing the improvised nature of data construction in fieldwork settings and by demonstrating how rough encounters with archaeological remains are stabilized and made more legitimate through documentation practices.

Methods, Data and Approach

This paper draws from observations of and interviews with archaeologists at work, as well as the documents that they produced. Specifically, I articulate how archaeologists enacted various activities and how their actions were situated as part of broader systems of knowledge production. My involvement with this project constituted a longitudinal investigation of archaeological practice that contributed to my doctoral dissertation (Batist [2023](#)).

Case

I base my findings on a singular case – that of a research project comprising excavation of a prehistoric site in Southern Europe. It is directed by a foreign professor affiliated with a North American university, who coordinates various specialists whom the director recruited for their expertise in the interpretation of finds, a number of trench supervisors who lead excavation and coordinate data collection, and excavators who are usually less experienced students who operate under the guidance of their assigned trench supervisors.

I actively contributed to the project for several years, primarily serving as a database manager. I documented how participants engaged with this project's information system from 2017 to 2019, which involved recording and interviewing archaeologists as they worked during the summer field seasons and holding additional interviews between fieldwork sessions. The project's director also provided access to all documents and records for the purpose of this research.

This project served as a useful case study that illustrated the pragmatic and multifaceted ways in which participants reasoned and worked their way through the rather mundane activities that archaeologists commonly undertake in similar research contexts. In case-study research, cases represent discrete instances of a phenomenon relating to researcher's interest (Ragin [1992](#)). Cases are therefore not the subjects of inquiry, but the vehicles

through which phenomena of interest are manifested in an observable way. I recognize that all archaeological projects are informed by their own histories, memberships, sets of tools, methods, and social or political circumstances, which inform distinct traditions of practice, and that it is not possible to generalize across the whole discipline through a single case study. However, I am able to articulate some significant factors that contribute to decisions and behaviours that archaeologists commonly make and enact, and to make certain underappreciated social and collaborative commitments that underlie common tools and practices more visible. I am therefore able to draw attention to certain patterns of practice that relate to contemporary discourse on the nature of archaeological data and ongoing development of information infrastructures.

As such, my conclusions are informed by the informants whose actions and attitudes I sought to articulate, and by my own perspective as a scholar of the culture and practice of archaeology and of the media and infrastructures that support it. One implication is that commercial archaeology, which comprises the vast majority of archaeological work in North America and Europe, is out of the study's scope, owing to the fact that the case represents a research project and that I have very limited experience with and knowledge about commercial archaeology. However, see Chadwick (1998), Thorpe (2012), and Zorzin (2015) for similar research pertaining to commercial archaeology.

Data

My dataset comprises recorded observations, embedded interviews, retrospective interviews, archaeological documentation, and ethnographic and reflexive fieldnotes.

Observational data comprised records of participants' behaviours as they performed various archaeological activities and take the form of video, audio and textual files. They enable me to document *how* practices are performed, in addition to the fact *that* they are performed. Moreover, observational data allow me to document what participants actually do as opposed to what they think or say they do. For instance, I situated activities in relation to broader systems even when participants are unaware that they are contributing to these systems, and to consider how activities occurring at various times or in various contexts indirectly relate to, compare with or inform each other. Some of the primary foci of my observations were the processes that result in archaeological records; people's use of information objects or interfaces, which sometimes differ from expected behaviour established through their design; how subjects implemented unconventional solutions or "hacks" to work around problems; how the context of an activity affects its implementation; and how local or idiosyncratic terms, concepts and gestures become established in a research community.

Embedded interviews comprised conversational inquiries with participants in the context of their work, and were meant to account for participants' perspectives regarding how and why they act as they do, given the immediate constraints of the situation at hand. Embedded interviews provided insight into the practicalities of work in the moment, from the perspective of practitioners themselves (Flick 1997, 2000; Witzel 2000). They are also useful for comparing participants' responses with observational records to interrogate how and why participants' observed actions may differ from the rationales elucidated from embedded

interviews. Some of the primary foci of my embedded interviews are to account for how participants identify problems or challenges in their work, and to determine ways to resolve them; how certain people gain recognition as domain experts or authorities with specialized knowledge; how specialists relate their contributions to the contributions of others; and how specialists relate their situated perspectives to centralized knowledge repositories.

Retrospective interviews comprised longer interviews outside of work settings with select participants to contextualize data collected by other means and to determine participants' views on more general or relatively unobservable aspects of archaeological research (such as planning, publishing, collaboration, etc). They helped me gain insight into how participants situate themselves as members of and in relation to research communities, which may be characterized by different regimes of value and by different methodological protocols or argumentation strategies. Some of the primary foci of my retrospective interviews are to highlight participants' perspectives on the value of various kinds of research outputs, what they value in their work and the work of others, the major constraints and challenges that they and their communities face, and how they might resolve them.

I examined documents and media (such as forms, photographs, labels, databases, datasets and reports) to gain insight into institutional norms or expectations. My analysis emphasized how people interacted with these objects, so that I could assess how they valued them and the conditions under which they deemed them useful or meaningful. I also examined documents and media as means for encapsulating and communicating meanings among users across space and over time. This helped me to understand the vectors through which participants either tacitly form collective experiences or directly collaborate among themselves (Huvila 2011, 2016; Yarrow 2008). Some of my primary foci are understanding how document design and media capture protocols anticipate certain methods; how various activities refer to recorded information, especially archived information; the reasons why team members ignore certain equipment and forms of documentation despite their availability; how record-keeping is controlled through explicit or implicit imposition of limitations or constraints; why certain records play more a more central role than others; and how different archaeologists record the same objects in different ways.

Finally, my field notes comprised reflexive journal entries that I wrote between observational sessions or interviews. They also include moments from observational sessions or interviews that I deemed particularly important, as well as descriptive accounts of unrecorded activities or conversations that I have since deemed useful data in their own right.

I obtained informed consent from all individuals included in this study in compliance with the University of Toronto's Social Sciences, Humanities, and Education Research Ethics Board, Protocol 34526. In order to ensure that participants could speak freely about their personal and professional relationships while minimizing risk to their personal and professional reputations, I committed to refrain from publishing any personally identifying information. I refer to all participants, affiliated organizations, and mentioned individuals or organizations using pseudonyms. I also edited visual media to obscure participants' faces and other information that might reveal their identities, and took care to edit or avoid using direct quotations that were cited in other published work that follows a more permissive protocol regarding the dissemination of participants' identifying information.

Analysis

I analyzed recorded observations and interviews, and interrogated the roles and affordances of various tools and documents, using qualitative data analysis methods. More specifically, draw from the “constellation of methods” that Charmaz (2014: 14-15) associated with grounded theory, namely coding and memoing. See Batist (2024: 9-10) for a more comprehensive overview of the analytical methods employed for the project from which this paper emerges.

I refer to specific observations or interview segments throughout the rest of this text using references that resemble sequential endnotes, which are indexed in the Supplementary Materials.

Findings

I focus on a string of episodes where Jane, a promising trench assistant working at an archaeological project, learned to identify, differentiate, and document parts of a stratigraphic sequence. I illustrate how the constitution of the archaeological record, and the internalization of archaeological knowledge, occurred as part of project frameworks and collaborative relations that were structured by projects’ divisions of labour.

Learning to see like an archaeologist

As illustrated in Figure 1, Jane explained to me how she identified and differentiated a new context that she was beginning to expose in her trench, using a series of gestures paired with speech to help convey what she meant to say.¹ Jane kicked the boulders as she referred to them, literally pointed out relations to previous experiences that she deemed relevant, and described certain aspects of the soil by miming the ways that she would interact with them. She referred to common nomenclature outlined in the project’s excavation manual, and drew from her experiences working in other trenches that others may have shared. More generally, she described the context change only in terms of her interactions with it, and as framed by her particular role in the project.

Afterward, and as illustrated in Figure 2, Jane consulted with Basil, who supervised work in this trench, and who is also the project director, regarding her interpretation of the soil in it.² Jane explained what she saw, in terms of her encounters with the entities she identified, while punctuating her observations with physical gestures that underscored certainty that the entities she was observing actually exist. Basil came to take a closer look and translated Jane’s situated experiences into more nominal and normalized terms, that distance the observer from the observed entities. Basil then identified a series of actions that Jane must implement, and summarized the situation by joining what was observed with what was to be done about it, in effect rendering a conclusive and well-reasoned decision. All the while, Jane confirmed her understanding of Basil’s corrections and of his specific instructions.

When Jane explained her interpretation of the soil to her supervisor, he then responded

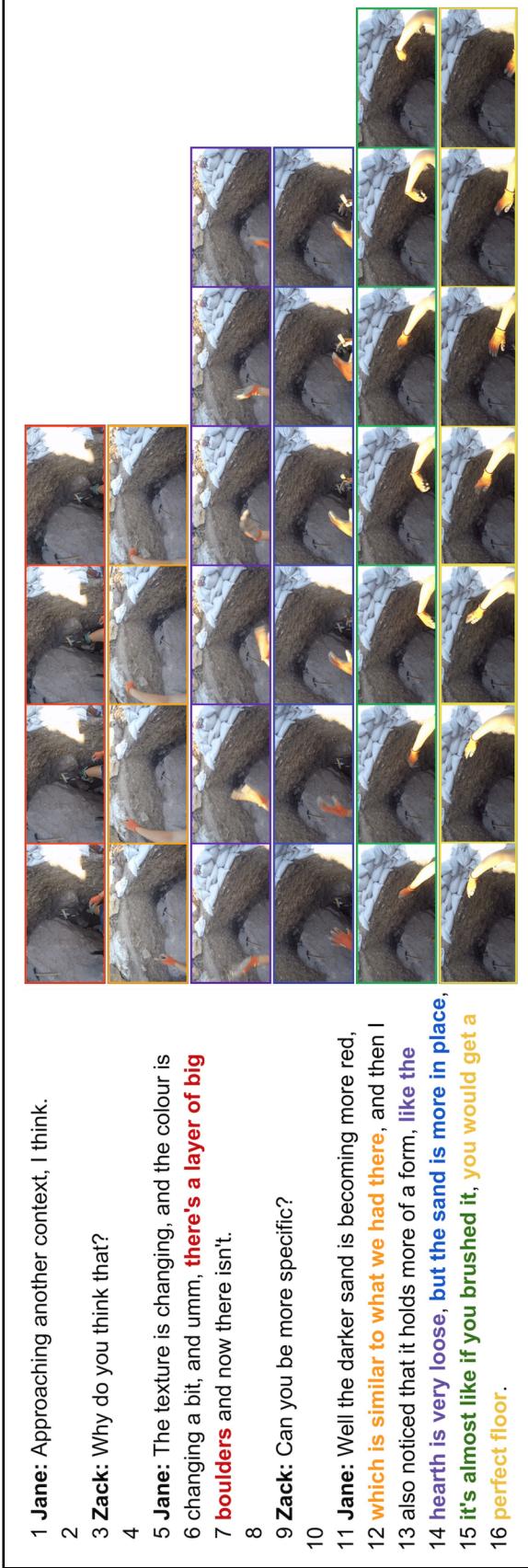


Figure 1: Explanation of a potential context change using gestures and speech.

<p>1 Jane : So, this is like still kind of a dark, dark 2 brown, going into the sand, but it's like really 3 tough, like hard to dig through, kind of. So I think 4 maybe it's just context [7]. ((gesturing towards 5 other side of the trench)) And then this is like really 6 light grey, ((bobs hand up and down to emphasize 7 these last three words)) and I thought it was just 8 cuz it had just dried out, and I hadn't done this 9 kind of [fill], but it's also really hard to dig, and 10 like a really light grey, so I don't know if it's just 11 remnants of this part, or what...</p> <p>12 ((Basil gets in the trench to take a closer /look))</p> <p>13 Jane: Or like maybe this is like, would it be 14 possible that that's like an older hearth, like the 15 other one that was leached out?</p> <p>16 Basil: Yeah, hmm. So the colour here is the same 17 as what you were digging, but the consistency 18 has changed?</p> <p>19 Jane: Yeah.</p> <p>20 Basil: I would clean up, maybe just straighten 21 that section a bit, [</p> <p>22 Jane: yeah</p> <p>23 just to the depth that you started at for this 24 context, [</p> <p>25 Jane: yeah</p> <p>31 and then we'll clean up and carry on with... you 32 know we can just write in the text that, you know, 33 these are the differences, [</p> <p>34 Jane: yeah 35 but you know what, after we start to dig it it 36 might change back to something much more 37 familiar, [</p> <p>38 Jane: yea 39 and we can just say oh, it's like some kind of 40 differential lens of material within it, [</p> <p>41 Jane: right 42 yea, or quite possibly a continuation of what we 43 had before... [</p> <p>44 Jane: okay 45 Jane: Okay, so just clean up the walls, and then 46 keep going, okay.</p> <p>47 Basil: Yeah, but we can photograph, change 48 numbers</p> <p>49 Jane: Oh, okay.</p> <p>50 Basil: We'll treat it as something different, you 51 know we can write in the notes that there is a 52 very good chance that it's still the same stuff, but 53 the consistency changed [</p> <p>54 Jane: right 55 so, just to be careful.</p>

Figure 2: Discussion of a potential context change using gestures and speech.

with tentative agreement, paired with his own gestures and intonations that subtly communicated his agreement or disagreement. The conversation between Jane and Basil therefore served as a means of calibrating their experiences, using an independent framework as a common reference point. In effect, Basil attempted to align Jane's emerging perspective with professional nomenclature used to describe the sediment's character.

As Jane stated in a subsequent interview (Figure 3), she initially found it difficult to "train her eye to see what they're seeing", and "they" seems to refer to more senior and specialized archaeologists, including her supervisor the director, and Alfred, one of the field directors.³ By talking through their observations in an explicit manner and in the presence of the entities of mutual concern, while also referencing concrete characteristics of the soil, Basil trained Jane to see things in a way that corresponds to a formal model of how to differentiate soil, and contexts as an natural extension of that ability. This made him more confident in Jane's ability to recognize and report her experiences, upon which Basil depends; as he recalled in a separate interview, Basil came to trust Jane "to either make her own decisions or be responsible enough to ask other people to help her make decisions for those moments when I'm not there."⁴ This was because Jane became capable of deciding for herself when and how to distinguish between sediments, having internalized a conceptual framework that affords professional legitimacy to her observational techniques.

Jane: ...it's always hard to like train your eyes to see certain things. Like sometimes Alfred [the field director] would like take out a handful of sand and go like do you see the red flakes? and I would be like no. Or even like, pointing out stratigraphy, like see how this changes to this level, and it just kind of, training your eye to see what they're seeing is, sounds like an easy thing but it's actually hard to like, kind of, pick out things that they want you to pick out. And I think like now it's easier to like, oh, see how that's transitioning, or like, umm, even just like comparing peoples' trenches and like the contexts they're in, it's easier now but at the start it was like, it looks the same to me, or like I don't spot what you're spotting, you know? And it's just a way of looking at things that I think that's the hardest part for me.

Zack: Do you know how that developed?

Jane: I think just like repetitive, like every day, looking at stuff, I think is like, just a good way of learning. I don't know if there's something specific but... and just hearing from like, hearing Alfred pointing it out, hearing Basil pointing it out, hearing different supervisors pointing it out, it was just different ways of explaining it or showing it to you that it starts to kind of, like, produce a form of knowledge.

Figure 3: Jane describes how she learned to recognize differences in the soil.³

Shedding the body

I should note that Jane did not actually object to the reduction of her situated experience in favour of more generic forms of representing the stratigraphy. In fact, this conformed with a pattern of behaviour – which was enacted by all the fieldworkers I spoke with – whereby they tried not to think too much while excavating, opting instead to operate in the moment, responding only to what was directly in front of them.^{5, 6} This conformed with the

expectation that the things an excavator uncovers will gradually reveal themselves, and that she should passively follow what is occurring in the earth before her.

To help accomplish this, fieldworkers modified the environments in which they worked. For instance, some fieldworkers focused better while listening to music or while blocking out social distractions.^{7, 8} Ben, who worked as an assistant in a separate trench, said that listening to music helped him avoid being too self-aware⁷ while Jane concurred by expressing that she listened to music to help her “get lost in digging.”⁸ Even when music was not used, or when it is forbidden on site, there remains a warrant for fieldworkers to remain focused as they work.⁹ For instance, Basil recalled what he characterized as “old fashioned” archaeological fieldwork practices, which dictate that “the only sound you should hear is trowel on stone.”⁸

Having all the necessary tools at hand was another way to facilitate uninterrupted focus during fieldwork.¹⁰ This helped eliminate peripheral sensory distractions when getting up or reaching for tools placed further away. In effect, fieldworkers were made to become disembodied sensing devices attuned to one thing and one thing only: the soil immediately in front of them. This notion was further underscored by my unrecorded but common observations of supervisors having to force assistants to take breaks, drink water, apply sunscreen, and remind them that they have bodies worth cherishing and protecting.

In some cases, fieldworkers found certain kinds of information useful as they excavated. For instance, knowing about similar stratigraphy in nearby trenches enabled excavators to work at a quicker pace, since it this provided a general understanding of the order and depth of the stratigraphy under them.^{11, 12} Moreover, when finds specialists reported back to fieldworkers about the contents of their ongoing trenches, their preliminary findings sometimes influenced the care with which they excavated and recorded the trench.^{13, 14} While Theo (a trench supervisor who eventually became a field director) indicated that knowing about the properties of lithic artefacts that lithics specialists deemed important helped him undertake his work in a manner that better suited the project’s overall aims, he presented this notion in very broad terms, and refrained from indicating specific practical impacts when prompted.¹³ Moreover, Ben dismissed the input provided by palaeobotanical experts as useless to him because he was unable to “see” the archaeobotanical traces as he worked.¹⁵ This may merely reflect practical concerns, specifically regarding the microscopic nature of properties that render archaeobotanical remains significant, but it would not be absurd to find ways to help fieldworkers make sense of such insights in the field. For instance, fieldworkers may carry a magnifying loupe and reference guide, and be trained to understand how to use them, similar to how Jane learned to characterize soil samples in the field. However, this would require a more comprehensive partnership between specialists and fieldworkers, and broadening the extreme focus that fieldworkers have honed for themselves.

In general then, I observed aspects of fieldwork practice that both complement and contradict efforts to enhance reflexivity in fieldwork. The professed desire not to overthink while excavating pushes back against impulses to provide more information to fieldworkers during the moment of excavation (cf. Berggren 2012; Berggren et al. 2015). According to Theo and Ben, fieldworkers operate in a strictly separate role than those who interpret and write about finds, and this boundary feels natural to them.^{16, 17, 18} Rather than ingest loads of additional information, which involves learning how to make sense of it all and find it meaningful in

a practical sense,¹⁹ the fieldworkers I spoke with went in the opposite direction; they value their extremely focused experiences with the material, which presents them with a unique and proprietary way of knowing that dissipates as they are, as Edgeworth (2003: 109) put it, forced to “[detach themselves] from the task-in-hand to consider the material field from a distance”. This means of engagement feels more natural to them, as if unmuddled by reflexive thought, and the fieldworkers I spoke with perceived this as a strength.

At the same time, the fieldworkers I spoke with were very aware that all observation is subjective and that all records carry biases imposed by the practical circumstances of their creation; they were deeply involved in navigating these practical circumstances and in devising ways to control their environments to foster the *illusion* of objectivity. All of what I described was in service of a broader systemic framework, which is informed by a (flawed) conception of the nature of archaeological data and of what constitutes proper or legitimate archaeological reasoning (Batist, *In review*).

Leaving traces in the subsequent record

Turning back to the specific example, Basil’s prediction that the context would not change came to fruition. However, the tentative decision to proceed as if a change in context was imminent left residual traces on recording sheets, in the database, and in the final trench report (see Figure 4 and Figure 5).

Why did you change contexts?

We think we are still within the hearth(?) feature but in the western half of the trench (i.e. that part not covered by a boulder) the sediment has changed somewhat. In NW quadrant the soil is still dark but is now more compact. In SW it is more compact and more grey.

Context description:

SW corner of trench where a grey (ashy?) compact soil. 100% soil for flotation. Fewer artefacts. After a couple of centimetres it turns back into the black soil (i.e. this is now another arbitrary stratum in the hearth feature).

Figure 4: Transcribed section of a recording sheet describing the context addressed in the observed episode.

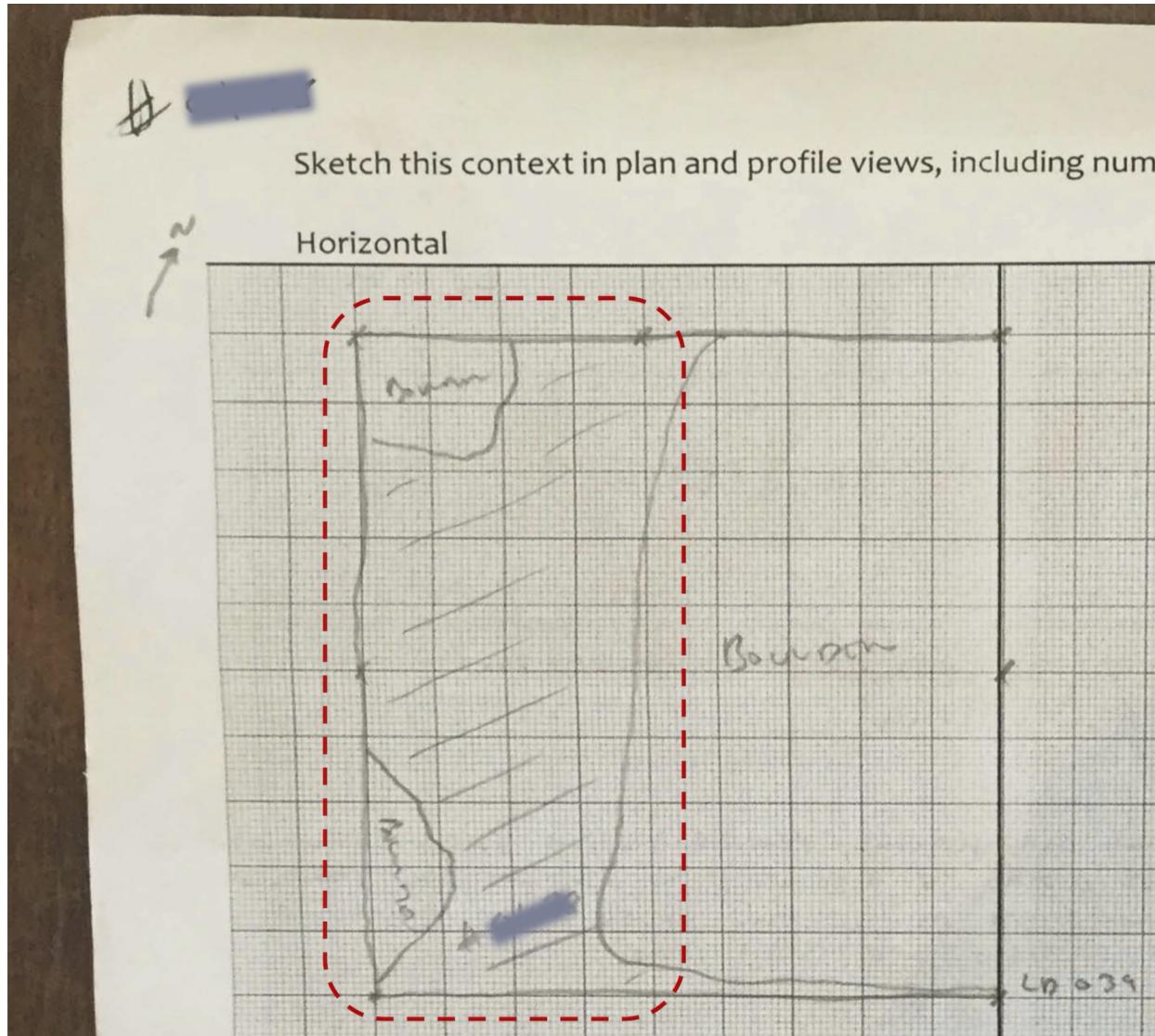


Figure 5: Sketch of the base of a trench, portraying the context addressed in the observed episode, boxed in red.

Moreover, the tentativity and ambiguity that Jane and Basil experienced while excavating this trench was one of its notable properties, as elicited in the final trench report (see Figure 6). Additionally, the report described how the contexts were eventually lumped together into a more concretely defined “lithostratigraphic unit,” which was formally delimited using nominal and standardized terminology. In this way, the report switched back and forth between ambiguous and concrete representations, which conveyed experiential and distant perspectives, respectively. This resembles the tone switching that occurred in the conversation between Jane and Basil, whereby Basil, as supervisor responsible for creating formal documentation, re-presented Jane’s experiences using more formal terms. As such, this reflects an implicit recognition that there is immense value in being able to share more nuanced perspectives on the things that make up the archaeological record (as per Batist 2024).

Context (); LU ()

The sediment in this context had changed a bit but we assumed we were still within the hearth(s). In the northwest quadrant the soil was still dark but was now more compact and in the southwest it was also compact but more light grey in colour. It appeared more ashy so we described it as a new context. However, after a couple centimetres it turned back to the darker soil so it was then decided that this was indeed a continuation of the hearth. It was then considered an arbitrary change of context. Overall, it was grey ashy soil with angular and

fairly compact stones, it was medium/fine sand, poorly sorted, and 10YR 4/1. 100% of this was also taken for flotation. The boulder begins to drop off here and does not take up any more of the trench. No sediment from beneath this large boulder was taken. However a new smaller boulder can be seen in the middle of the remaining open western side in figure 17 and more exposed in figure 18.



Figure 97; context [redacted], opening, photo from the west, 1000747

Figure 6: Section of a trench report describing the context addressed in the observed episode, and situating it as part of a lithostratigraphic unit.

It is notable that situated experiences were recorded in the report-writing phase, and only by those acting in authoritative roles. This parallels how field journals – which are also records of situated experiences – are exclusively maintained by supervising personnel (Batist 2024). These observations reflect the different kinds of agency held by different actors in the project. Fieldworkers were encouraged to shape their behaviour so that the information they obtained was born as formal entities from the start, whereas those responsible for presenting the record as part of a broader scope of work were responsible for re-situating the data as products of data-collection processes that they designed and dictated. Recognizing the situatedness of data while they were being collected would have warranted recognition of their limitations, and was thought to enable undisciplined data collection behaviour.²⁰

Discussion and Conclusion

My findings demonstrate how the production of stable and concrete archaeological records involves characterizing the phenomena of interest in nominal terms, while downplaying the

situated and embodied experiences that informed the records' creation. The paper shows how these values are instilled through the social and material experiences in which fieldwork is embedded, which inform students about how their labour, and the outcomes of their labour, contribute to collective efforts.

More specifically, I observed a tendency toward enforcing formally-defined records in support of analytical tasks down the line. Fieldwork is therefore presented as a means to an end, and fieldworkers are accordingly rendered as instruments that can be wielded to support future analytic endeavours. This reveals how the management of archaeological data and of archaeological labour are inherently intertwined. Consequently, the mechanisms through which archaeological projects establish control over those whose labour produces data bear broader epistemic implications regarding the nature and use of evidence in our reasoning about the past.

To be clear, the instrumentalization of archaeological labour is not necessarily a bad thing. Information commons, such as the pool of knowledge accumulated throughout an archaeological project, do not necessarily have to be egalitarian, and are always governed by norms and expectations concerning who may contribute to and extract from communal resources, and in what ways these interactions should occur. The fieldworkers I spoke with (including those whose elicitations do not appear in this paper; see Batist 2023, which is the broader dissertation from which this paper derives) generally valued their contributions as sensory devices. This is linked to the idea that fieldworkers are capable of seeing things as they really are – as material entities that have seemingly not yet been ascribed stable meaning. As such, fieldworkers actively contributed to honing the illusion of their objectivity, which enhanced their value as members of the project and as domain specialists with their own unique mental skills. At the same time, it was also clear that fieldworkers knew, on an intuitive level, that any claim of objectivity is overstated (Batist 2024: 12). However, their positions as responsive rather than creative actors (cf. Batist, *In review*) ensured that they are not responsible for resolving this tension.

The tension between the desire to achieve a state of objective sensor, and the inherently situated nature of observing and recording things, persists. All observation is embodied, and all records carry biases imposed by the practical circumstances of their creation. It is unclear how, or even if, this can be resolved – but it may perhaps be eased by fostering a commensal and social attitude toward data-sharing, instead of the formal and transactional paradigm that underpins most open data infrastructures.

Author Statements

Acknowledgements

Funding Statement

Data Availability Statement

The data generated and analysed during the current study are included in this published article's Supplementary Materials.

Competing Interests statement

Figure Captions

Figure 1: Explanation of a potential context change using gestures and speech.

Figure 2: Discussion of a potential context change using gestures and speech.

Figure 3: Jane describes how she learned to recognize differences in the soil.

Figure 4: Transcribed section of a recording sheet describing the context addressed in the observed episode.

Figure 5: Sketch of the base of a trench, portraying the context addressed in the observed episode, boxed in red.

Figure 6: Section of a trench report describing the context addressed in the observed episode, and situating it as part of a lithostratigraphic unit.

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