

Past/present tensions in an archaeological design thing: Rethinking spaces of alliance and interaction at a Classic Maya site

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Introduction

Our shared mandate in this seminar is a focus on collaboration, and the ways that different groups (individuals, stakeholders, publics) can be invited in and given space in design anthropology settings. We are thinking particularly about the special spaces enabled by “design things,” and how they allow for inclusion *in the moment*. In this paper, I will discuss a design anthropological experiment underway as part of an archaeological project in Belize, in which we create a space of alliance and interaction between modern archaeologists and ancient inhabitants of Maya archaeological sites. The goal is to create (or mimic) opportunities for collaboration between individuals who will never meet directly, but who share common concerns – in this case, with objects and the nature of materiality.

The tool for accomplishing this is our newly developed digital archaeological recording system, one that impacts archaeological practice and interpretation in the field, while it is happening. This tablet-based database follows a broader move towards digital archaeology, a change that impacts archaeologists’ experience in the field and their interaction with the paperwork that filters their experience and translates their material finds into standardized data. But, the design thing I discuss does more than this—it metamorphs archaeological experience by bringing a critical group of stakeholders to the table. It creates a digital and intellectual space for Classic Maya understandings of the artifactual materials commonly encountered by archaeologists to be folded into the process of perceiving in the field: using this database enables archaeologists to see things differently.

This case study is interesting to our larger conversations here because it deals with collaborations that include people who are non-present (and, in my case, at a significant temporal

removal – one thousand or more years). In this example, we see that design things can effectively include such distant publics, creating spaces of alliance and interaction, as well as productive friction and dissonance.

Thinking about stakeholders and collaborators

With whom are we collaborating? – Particular archaeological challenges

When we think about archaeological work, we may imagine a variety of interested groups (including archaeologists, local inhabitants, descendant communities, governmental agencies, etc.), but I want to emphasize a distinctive set of stakeholders: the past creators and users of archaeological objects. In my specific case, these are Classic-era (ca. AD 250-900) Maya individuals who inhabited the site I am excavating, together with my co-director, Dr. Linda Brown, in northwestern Belize.

Certainly, archaeologists think about these ancient individuals all the time: the ways in which we interpret artifacts in order to access past realities is based on reconstructing what people did in the past, and how the material remains we find formed parts of a meaningful ancient lived environment. But, there is a wrinkle here – even while thinking carefully about these ancient users of objects, our modern scholarly questions often are guided by our own interests, or our own understandings of the qualities and capabilities of objects. How can we shift our perspective? If we think for a moment about user-centered design, we see a movement away from privileging the preoccupations of the designer(s) and an increasing consideration of the future or subsequent experiences of the users. This shift has the important impact of recognizing possible (and critical) misalignments between the knowledge, expectations, and meanings associated with different communities of practice (Wenger 1998). In archaeological cases, the shift I am suggesting involves a kind of temporal inversion, in which we must move outside of a modern space of scholarly observation to try to access the experiences of the original users in the past.

Many archaeologists are interested in thinking about emic perspectives and past experiences, but there are two important distinctions in the approach that I am taking. First, our collaboration with past users is based on something very basic and foundational – engaging with the actual material qualities of objects (what are they made of? how are they perceived or seen?). Material engagement is fundamental in shifting or metamorphosing the view of

archaeologists. Second, our archaeological design thing – which involves data recording at the time of excavation – enables us to make this shift *in the field*. In this way, it yields cross-temporal collaborations that occur at the moment of encounter with archaeological objects, rather than after the fact (i.e., in a subsequent interpretive stage).

How can we invite in these past collaborators? This is the crux of what is both intriguing and challenging about this case study – my suggested collaborators are not directly accessible. If we think about collaboration in a modern participatory design sense, this may feel like a hopeless endeavor. Clearly, such co-design experiences are not available to archaeologists trying to meet with Classic Maya stakeholders. We have to imagine another version of collaboration, one in which expert or professional visions (per Goodwin’s [1994:606] idea of “socially organized ways of seeing” connected to particular groups) are brought into a space of collaboration and allowed to interact, highlighting alignments/misalignments between these ways of viewing parts of the world.

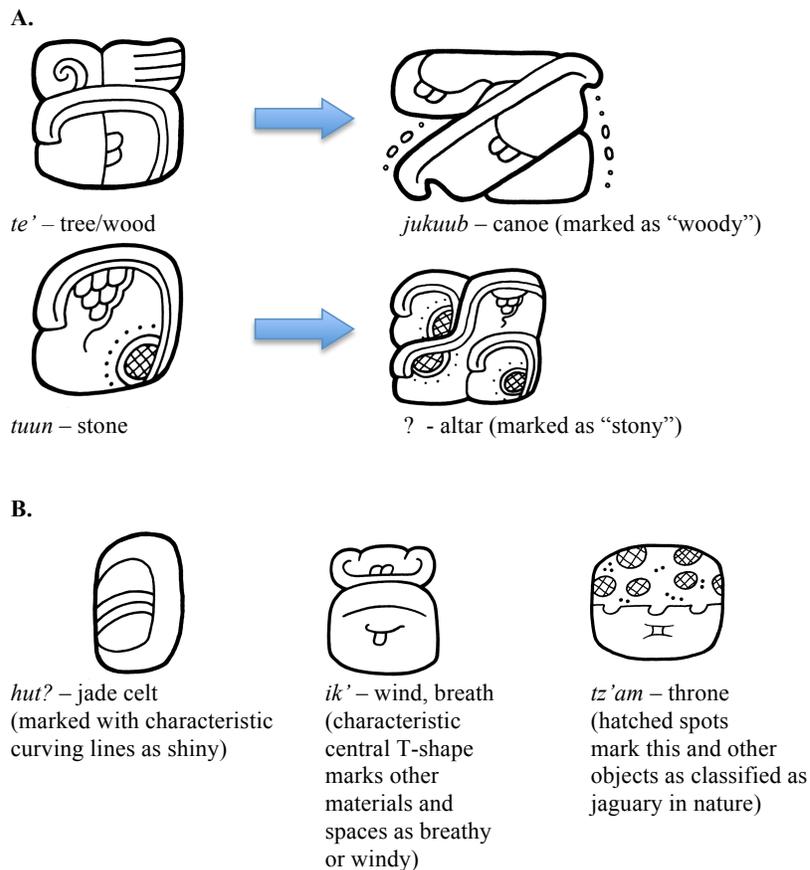
How do we include a temporally distant public in our design thing?

Including a temporally distant public in our design thing involves investigating and embracing aspects of a Classic Maya vision on materiality. Reconstructed indigenous knowledge of the material world is based on information drawn from primary source textual and visual documentation (specifically, hieroglyphic texts and iconography dating from the Classic era). I can offer a variety of caveats here (about the partialness of these sources, issues with the elite identities of the producers, variations in ancient Maya experience across time and space), but I argue that we can nonetheless extract some basic and shared ideas about materiality and the material world that can be usefully contrasted with the ways of looking used by archaeologists.

There are two main areas within a Classic Maya material vision that I want to highlight: the physical characteristics (and associated categorizations) that are considered visible or salient in material objects, and the capabilities of objects, especially in terms of their ability to enter into relationships and social networks.

Let me say something first about characteristics and categorizations. Within the world of ancient artifacts that they encounter as part of their work, archaeologists are frequently interested in material qualities and material categories, as a way of organizing the assortment of ancient materials that they encounter (so, from an archaeological view, divisions into ceramics, lithics or

stone artifacts, bone, etc., for instance). Significantly, these categories are locally or culturally defined – Ingold reminds us that we should think of material attributes as “histories” rather than “properties” (2012:434). Pivoting on the archaeological way of seeing the material world as organized or lumped into meaningful categories, we can use Classic Maya “property qualifiers” (visual markings on hieroglyphs that convey information, but that are not formally read [see Houston et al. 2009, Stone and Zender 2011]), to identify some of the categories into which ancient Maya individuals classified or ordered the world around them. Some of these property qualifiers are quite literal, and unsurprising – woody materials (like canoes), stony materials (like altars) – and also correspond with our modern, archaeological assessments. Other material categories are less literal – shiny/bright/wet, airy/windy – and much harder to align with our own perceptions of the material world.



Hieroglyphic markings showing “property qualifiers” – that is, visual references to constituent materials. These markings show literal properties that were notable or salient to the Classic Maya (e.g., a canoe made of wood, or an altar made of stone; see A. for examples of the repetition of generic “woody” or “stony” markings on specific glyphs for objects made of these materials). Marked salient properties include both physical materials recognized by archaeologists (e.g., wood, stone) but also qualities that might not be less obvious to a modern, Western viewer (e.g., shininess, airiness, jaguariness – see B.; significantly, these visually-marked qualities are all found on multiple, other glyphs referring to objects and materials).

The other segment of a Classic Maya material worldview that is particularly important for us to try to “see” has to do with the ability of objects to engage in social relationships in ways that are non-standard in modern, Western thought (and in most archaeological expert visions). We know that a Classic Maya understanding of objects and materiality left open the door to objects exerting agency, and to being closely connected to humans through processes of partible personhood in which special objects (object-persons) became receptacles for parts of humans’ souls. These types of special objects received treatments that underscored and reinforced their person-like qualities; these included dressing, feeding, curating, and capturing/killing (L. Brown personal communication).

These are two parts of a Classic Maya material vision, representing aspects of their understanding of how objects in the world work and are seen. They diverge (sometimes radically) in multiple places from archaeological perspectives, and have the potential to really change our understanding of objects. In terms of our cross-temporal collaboration, these reconstructed elements of an indigenous or emic material worldview represent how we include the Classic Maya – despite their temporal distance – in a space of collaboration with modern researchers. The next, and pressing, question is: how do we use this knowledge in order to not simply contrast with archaeological perspectives, but to create a collaborative process that allows for some elements of hybridity and flexible movement between worldviews or ontologies? Let me tell you now about the design thing we have made in order to allow this to happen.

The space of our archaeological design thing

Transformations in experience and organization

Our experimental design thing allows for collaboration while in the field between modern archaeologists, and the temporally distant ancient individuals whom we are investigating. Our design thing – a hybrid relational database, accessed on an iPad – accomplishes this by constructing a meeting space that encompasses two different material worldviews, and facilitates movement between them. I want to say a little bit first about standard archaeological recording forms to provide some perspective on how our design thing represents a shift from this. Here you can see an example from the site where I work; the format is dictated by the regional umbrella project under which we operate. Even an apparently “blank” space like this is “already ingrained with expectations and experiences” (in parallel to a design issue raised in Telier’s

discussion of student projects [2011:132]). There are two things to which I want to draw your attention.

PfBAP - Lot Record Form

RB _____

Project: _____		Site _____	
Recorder: _____		Excavator(s): _____	
Operation _____ SubOp _____ Lot _____		Date Opened _____ Date Closed _____	
Lot Type (Check Appropriate) <input type="checkbox"/> Burial <input type="checkbox"/> Cache <input type="checkbox"/> Construction Fill <input type="checkbox"/> Floor <input type="checkbox"/> Hearth <input type="checkbox"/> Humus <input type="checkbox"/> Interface <input type="checkbox"/> Midden <input type="checkbox"/> Surface <input type="checkbox"/> Wall <input type="checkbox"/> Other _____			
Lot Location			
Horizontal _____		Vertical _____	
Lot Description			
<hr/>			
Materials Observed and Collected (O=Observed, C=Collected) <input type="checkbox"/> Bone <input type="checkbox"/> Ceramic <input type="checkbox"/> Groundstone <input type="checkbox"/> Lithic <input type="checkbox"/> Obsidian <input type="checkbox"/> Shell <input type="checkbox"/> Other _____		*Collected Samples (Check Appropriate and Define Below) <input type="checkbox"/> Botanical <input type="checkbox"/> Bone <input type="checkbox"/> Carbon <input type="checkbox"/> Flotation <input type="checkbox"/> Hydration <input type="checkbox"/> Soil <input type="checkbox"/> Other _____ <i>*ALL collected samples must be accompanied by a Sample Record Form</i>	
Association Schematic Physically Below _____ Physically Above _____ Associated With _____		Termination/Elevations <input type="checkbox"/> Cultural _____ (type) <input type="checkbox"/> Arbitrary _____ (type) Beginning Elevation _____ Ending Elevation _____ Total Thickness of Lot _____ (e.g., 10cm, 38cm, 1.2m, etc.)	
Documentation <i>Photographs</i> Photographer _____ B&W Roll _____ Frames _____ Color Roll _____ Frames _____		<i>Illustrations/Maps (Check Appropriate)</i> <input type="checkbox"/> Plan Map <input type="checkbox"/> Artifacts <input type="checkbox"/> Profile <input type="checkbox"/> Other _____	
Comment, Descriptions, Interpretations			
<hr/>			

PfBAP 98

Example of archaeological field recording form from the Programme for Belize Archaeological Project.

The first is the actual physical format: it is a paper form, intended to be filled out in pen. The experience of this in the field is often less than pleasant, with documentation impeded by humidity, dirt, and uneven writing surfaces. Thus, our first transformation is in the interface of our design thing, which moves the recording practice into the digital world, offering a variety of clear logistical advantages (and taking part in a larger shift to paperless cyber-archaeology [e.g., Austin 2014, Fee et al. 2013, Rains 2011]). The tablet interface also creates a visually concentrated space for users to focus on when confronted with the immensity of documenting an archaeological site; Lawson (2004) discusses an analogous practice in some architects' use of relatively small design drawings, to allow for complete visual perception at a glance, and to avoid "losing sight" of things. This shift in physical format is more than a matter of convenience: rather, the digital interface for recording works to reduce friction (per Scheldeman 2012), allowing the archaeologist a sense of smoothness in his or her translation of experienced materials and contexts into the data that become part of the site's documentation and the subsequent scholarly narrative. The capabilities of the iPad also mean that the archaeologist's experience can involve multiple modes of translation – the archaeologist types, draws, takes photos, records audio and/or video in the process of organizing the full body experience of the archaeological site for consumption through the bounded recording form. This reduction of friction in the recording experience is particularly important because it contrasts with (and provides the user relief from) the second transformation of our design thing, which involves intentional addition of friction through the integration of Classic Maya material perspectives.

The second transformation of our design thing is an interpretive shift. Looking back at our standard paper form, I now draw your focus to the critical types of categorization and organization that occur in this space – ones based on classification and quantification of materials and their salient qualities, on characterizations of context, and even on what constitutes an object (i.e., what is included here, or omitted). This is a particularly important moment in the construction of meaning at archaeological sites: narratives of the past are created through the ordering of artifactual materials in culturally specific ways (e.g., Cobb et al. 2012, Hodder 1999, Yarrow 2008, and more broadly, Bowker and Star 1999). This means that the moment of recording while in the field is a loaded temporal nexus that we need to attend to as we think about incorporating the interests and perspectives of multiple stakeholders into narrative making about ancient sites and materials; in our design thing, we are adding friction to this process –

slowing it down, making it less rote or familiar or comfortable – by integrating different material viewpoints into our recording practices. Our design thing thus challenges archaeologists to re-examine the process of categorization and ordering by facilitating movement between their unmarked expert visions on the material world, and an at-times unfamiliar expert vision based on Classic Maya perspectives on the material world.

The impact of this archaeological design thing

Our Filemaker-based database works by creating a space for collaboration, one that occurs in the moment. (Throughout this discussion, I have to acknowledge the technical expertise and field-based observations of Chris Motz, a Classics PhD candidate at the University of Cincinnati, who is bringing our visions of this hybrid database into reality.) We do not abandon standard archaeological recording – it is necessary for our work and our collaboration with other archaeologists and projects, as well as for the requirements of our permit. What we see in the following two screenshots will yield a precise facsimile of the traditional paper form you saw earlier. The engagement of the archaeologist is changed by this interface: it is not a passive tool; rather it prompts (through dropdown menus), constrains (through options that depend on previous input), and connects (through the relation of new data to previously entered ones) the archaeologist.

iPad 2:41 PM 69%

Say_Kah_Database_Nov_26_14

< SubOp 3-I Lot 1 Associations

Basic Elevations Finds Images

Recorder: Lilia Walsh

Excavators: Lilia Walsh, Mike Pinto

Opened: Jun 24, 2011
Closed: Jun 29, 2011
Status: Complete

Lot Type

Burial Cache Construction Fill Floor Hearth Humus
 Interface Midden Surface Wall Other

Lot Location (Horizontal): Internal depression of C3

Lot Location (Vertical): Local datum

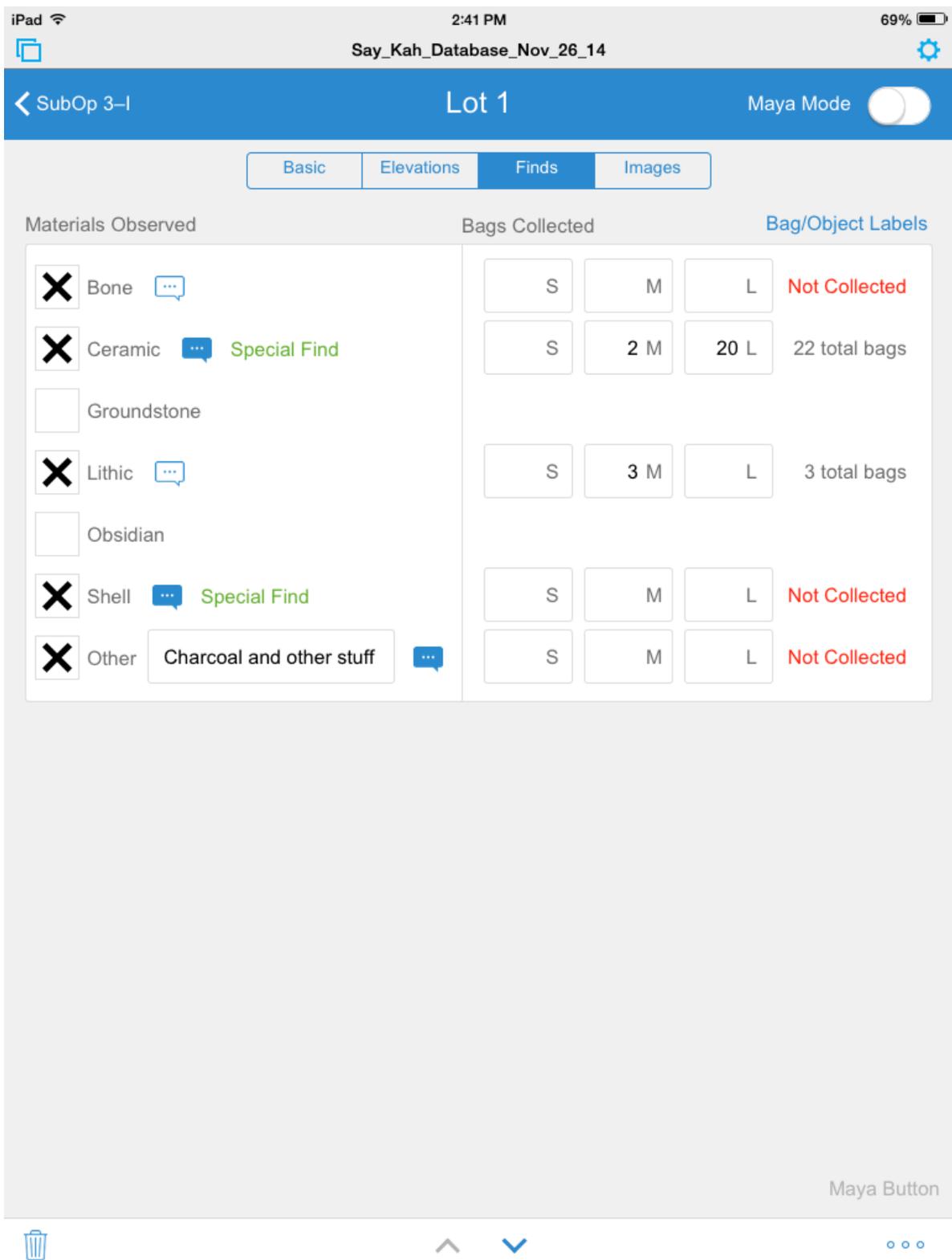
Lot Description

1 x 2.5 m (X, Y), oriented 10 degrees E of N. Located in depression of C3 group. Part of E-W trench over C3/4/5. E of Unit J, W of Unit T.

Comment, Descriptions, Interpretations

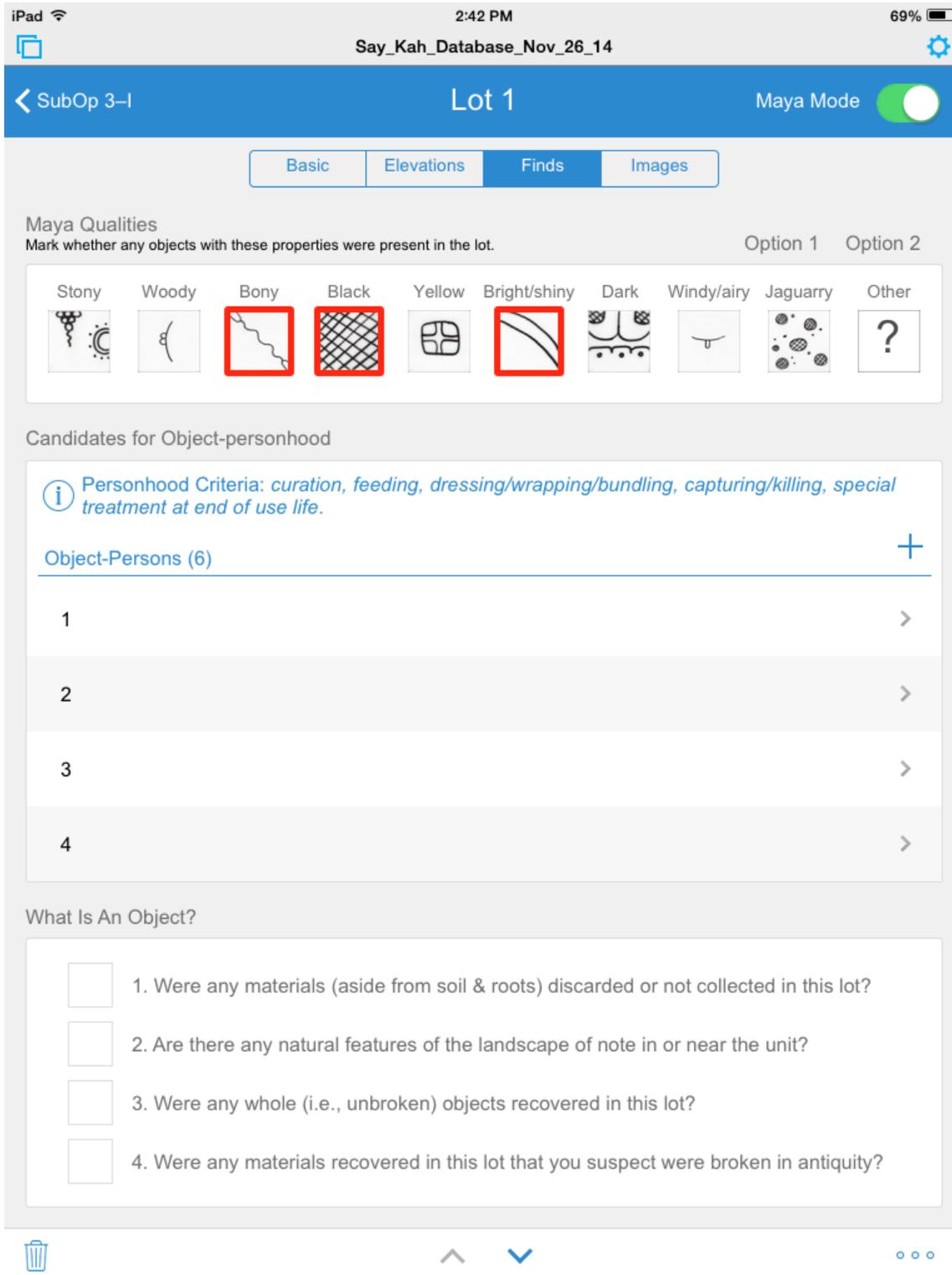
Locations / Concentrations of Artifacts: mostly evenly spread throughout, but a small concentration in NE corner. **Soil Composition:** sandy soil with pebbles.

Standard view (basic information) in our archaeological design thing. (Data displayed are only for testing/demonstration purposes.)

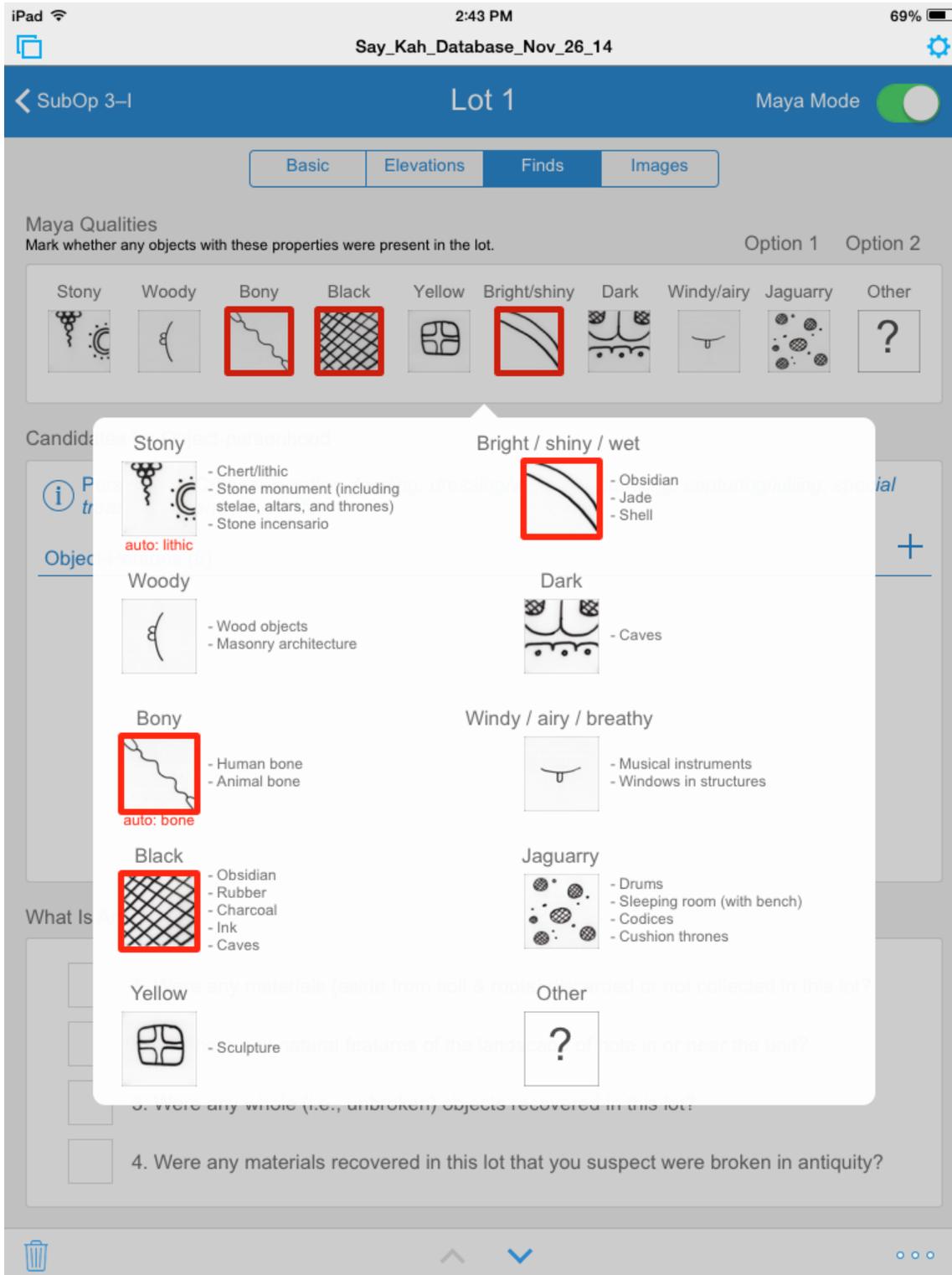


Standard views (finds page) in our archaeological design thing. (Data displayed are only for testing/demonstration purposes.)

We can move from this view – with a slider button in the upper right corner – to what is called the “Maya mode” in this design thing. Here, we have a different kind of interaction with the finds we are recording. Let me highlight a few things. At the top, you may notice some of those material qualities I mentioned before. Some of them are auto-filled, based on known associations from the hieroglyphic texts between archaeological/artifactual categories and these Maya categories – for instance, charcoal as black and drums as jaguary (note that some of these associations are more immediately obvious to modern viewers than others); these categories can also be manually selected, based on the excavators’ observations of materials in the field. The result here is two fold: in terms of individual objects, we are attempting to shift the archaeological vision of individual objects. (Is this an obsidian polyhedral core? Or is it a shiny/wet/bright object? It is both, of course, but we are challenged to refocus using the framework derived from ancient stakeholders.) Additionally, we can think about how this part of the “Maya mode” screen shifts things in terms of categories. Instead of the categorical “bins” we use in our standard form (and which then extend into the ways that artifacts are processed and analyzed), we are exposed to a different set of organizing principles. We can think about (and do things like spatially plot the distribution of) the “shiny” objects or the “airy” objects at a site, allowing us to remix our understandings of the presence and meaning of artifactual materials.



Screenshot of “Maya mode” in the design thing. Here, archaeologists document excavated artifacts using material qualities or designations derived from Classic Maya descriptions of materiality (the square images shown are the hieroglyphic markings that the Maya used to represent these categories in ancient texts). This page (center section) also allows for documentation of possible object-persons. The final section asks the archaeologist questions that help to decenter assumptions about what constitutes an “object” or “artifact.” In all cases, additional information is then documented on subsequent pop-up screens.



Screenshot of “Maya mode” in the design thing. This screenshot shows the pop-up that allows archaeologists to see more detailed information on Maya material qualities as they relate to artifacts archaeologists may encounter in excavations – this pop-up screen is a reference to help archaeologists in the field identify whether any finds should be assigned to Maya categories. In this example, “bony” has been automatically selected based on the documentation of osteological remains on the standard finds page, and the archaeologist has manually selected “black” and “bright/shiny/wet” as other material categories represented by finds in this lot; he or she is then asked to indicate which finds are assigned to these categories.

I want to draw your attention to one other part of the Maya mode page: the second section is aimed at identifying likely candidates for object-personhood. This section helps modern/western archaeologist users try to identify distinctive objects that may have been seen quite differently in the past in terms of their relational potential. The treatment criteria listed (derived from both ancient primary sources and also comparative modern ethnographic data) all help to confirm an entity's identity as a potential person (versus a non-person). Here, the impact is again twofold. First, special objects, ones that would have received particular attention in the past, are highlighted and rendered more visible (...and can be contrasted with what archaeologists might typically think of as special objects – e.g., materials that are seen as “expensive” or “rare” in terms of resources involved, source, necessary labor, etc.). Second, a new awareness of certain artifacts as object-persons in the past transforms how we imagine the space of a site and the ancient community located there. In particular, when we think about interaction, relationships, and networks of affiliation or alliance, we are now presented with the possibility of including these object-persons as active participants in ancient social landscapes (and perhaps even considering them as another type of collaborator, part of a network of actors [Latour 2005]).

How can we describe the impact of this design thing? We can see that use of this design thing by archaeologists in the field changes the way they perceive objects, and subsequently the ways they record the notable or visible characteristics of those objects; we also see a shift in the potentiality associated with these objects – what might they do, or have done in the past? We might characterize these shifts as “multiple travels” (Telier 2011:35), in which the users experience repeated movement back and forth between realities – this travel metaphor is an apt one, since users of our design thing are asked not simply to retrain their vision, but to time travel between versions of a site (and its objects) that are occupied and in use, and ones in which they appear silent and abandoned.

Conclusions

The frictional disruption in archaeological vision effected by our archaeological design thing is caused by a long-distance, cross-temporal collaboration, in which the material understandings of Classic Maya individuals are actively invited into the constructive space of archaeological recording. If we think about this database as creating a space of interaction

between temporally distant collaborators, we can think about the two different views of this database as cohabiting. There are then certain moments of contact between them – some of these are bridges (where meaningful connections are found) and also little explosions (where ideas are found to be radically different). Both of these sensations (the connective bridge, the disconcerting explosion) are meant to be noticeable, in a way that makes one look at, rather than through, Things (Brown 2001). What we see happening is both the bringing in of other (past) users, and also a change in how archaeologists are receptive to those users – both of these transformations are accomplished through the design thing of the database. Archaeologists' heightened perception of human-object negotiated interaction becomes doubled, encompassing both ancient Maya versions of material negotiations, and our own negotiations with the design thing that facilitates this awareness. We find, in a turning, kaleidoscopic sense, that the result is inherently partial views, and continuous travel through positions of alignment and misalignment in the material understandings of a particular archaeological space. Telier's characterization of alignment as process (2011:71) is particularly useful, as it reminds us that objects, contrary to our etymological leanings, should not be reified in either ancient interpretation or modern interaction.

We will use this new, experimental design thing in the field for the first time during our upcoming excavation season (May/June 2015) at the Classic Maya site of Say Kah, Belize. This will allow us to see it “in play” and observe (auto)ethnographically how it changes our experience of recovering and interpreting objects, and, in a larger sense, how it transforms our vision of the site where we work. Significantly, our project this spring includes both specialists (project co-directors, experienced graduate students) and non-specialists (undergraduates who will be taking part in an archaeological field school), which will help us to witness how expert visions shape (and limit) our interpretations, as well as some of the challenges in modifying modern visions to include the perspectives of other stakeholders. My goal is to create a space for productive tensions between differing assumptions about the material world and to facilitate movement between the familiar and unfamiliar, while also building an in-field commitment to ontological alliance with earlier users as we excavate and record archaeological finds.

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