

Laboring under an Illusion: Aligning Method and Theory in the Archaeology of Plantation Slavery

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Abstract A rich body of thought—developed by archaeologists and others—points the way toward dynamic understandings of who humans are, yet archaeology struggles to be more than a handmaiden. Arguably, the problem is one of method rather than theory: what counts as data, how we archaeologists categorize things, and what our problems are. This paper examines labor relations in the early Virginia colony via locally made clay tobacco pipes. These artifacts, often treated as emblems of ethnic identity, are here used to understand a society in the process of transforming its pluralities into the categories that we take for granted.

Extracto Un rico cuerpo de conocimiento—desarrollado por arqueólogos y otros—señala el camino hacia comprensiones dinámicas de quiénes son los humanos, sin embargo, la arqueología lucha por ser más que una sierva. Puede decirse que el problema es uno de método más que de teoría: lo que cuenta como datos, cómo los arqueólogos categorizamos las cosas, y cuáles son nuestros problemas. El presente documento examina las relaciones laborales en la temprana colonia de Virginia a través de las pipas de arcilla para tabaco hechas localmente. Estos objetos, a menudo tratados como emblemas de la identidad étnica, se utilizan aquí para comprender a una sociedad en el proceso de transformar sus pluralidades en las categorías que damos por hecho.

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Resumé Un riche corpus de pensée—mis au point par les archéologues et autres—ouvre la voie vers la compréhension dynamique de qui sont les humains, mais l’archéologie se démène pour être plus qu’une servante. Sans doute, le problème est celui de la méthode plutôt que de la théorie : ce qui compte comme données, comment les archéologues classent les choses et quels sont nos problèmes. Cet article examine les relations de travail dans la première colonie de Virginie par des pipes de tabac en argile fabriquées localement. Ces artefacts, souvent considérés comme des emblèmes d’identité ethnique, sont utilisés pour comprendre une société dans le processus de transformation de ses pluralités en catégories que nous considérons comme acquises.

Keywords slavery · pragmatism · Chesapeake · tobacco pipe · method · race

Introduction

To the extent that it encompasses slavery, a significant proportion of African diaspora archaeology is about work. The project of the enslaver was not necessarily domination—cultural or otherwise—for its own sake, but to steal labor. When we archaeologists examine that world, then, our project is not simply about (cultural) identity (“who” were the people at this site, producing this material culture), but social relations (the dynamics of interaction, the structures that provide context, and so forth). Archaeology as a discipline has developed—in conjunction with many other allied fields—a rich

theoretical literature that emphatically rejects the conflation of “pots” and “people,” or the simplistic acceptance of material markers of difference; for critiques, see Edwards (1995) and Cruz (2011). Our theory no longer attributes archaeological patterns to the essential, unchanging qualities of the person or group. However, it seems that we continue to turn to the same suite of analytical techniques and methodological frameworks, as if our theoretical thinking had not changed at all, as if culture were an entity, rather than a relation.

I use the ideas of pragmatism to think through how archaeologists close the gap between contemporary archaeological theory, method, and technique. Kluckhohn outlined the distinctions among these concepts in the sense that I intend them here:

theory refers to the conceptual framework of a single discipline; the category method refers to the sheer analysis and ordering of data (as opposed to the formulation of abstract concepts in terms of which such ordering is carried on). ... Technique is distinguishable from method only in so far as method involves the interrelations and consistency of a number of techniques. For example archaeological method encompasses a number of techniques such as surveying, photographing, field cataloging and the like. (Kluckhohn 1940:43–44)

Theory in archaeology embraces such concepts as ethnogenesis, praxis, and intersectionality. It may take a critical or postcolonial stance. Even mainstream science documentaries have joined the chorus of voices declaring race to be “an Illusion” (California Newsreel 2003). It is important for archaeologists to consider what shifts in method these new ideas might require.

With methods inspired and encouraged by pragmatism, we archaeologists can think about the nexus of labor and society in new and fruitful ways, with an emphasis on outcomes rather than intention. Collectively, we can achieve greater parity between our archival and material datasets. And pragmatism offers a new perspective on ways to do science that correct a possible imbalance in our current approach. This article highlights aspects of pragmatist thought that reinforce our methodological capacity for coping

with a polysemous archaeological record without resorting to arguments that contradict our theoretical frameworks. A pragmatist approach to archaeology seeks new problems, considers indexical as well as symbolic meanings, accords induction a meaningful role in scientific reasoning, and considers the consequences of both past actions and of our own practice. All of these enrich and are enriched by a focus on labor and difference in plural contexts.

Here, I emphasize the archaeology of slavery not only because of my interest in the subject, but also because I believe it is an especially fruitful locus for interrogating unexamined notions of difference and meaning. The archaeology of slavery and its close cousin, African diaspora archaeology, are, by definition, carried out on/in what the organizer of this issue has framed as plural contexts (Phillipi, this issue). The language of plural contexts allows one to remain—temporarily—agnostic about the nature or meaning of the differences among the individuals and groups that characterize a larger social unit. Plurality—the state of having many kinds of person in a social group—does not assume, explain, require, or cause inequality. It is, however, a prerequisite for inequality. *Pluralism*, as an ideology (“the given, the obvious ... our ideas about things taken to be natural” (Leone 2005:24)) is a notion that there are such things as social differences that are then used to frame and reinforce exploitations—slavery for instance.

As Kent Lightfoot notes: “pluralistic places” are historical archaeology’s stock-in-trade. But, he also points out that studies of such places often depend on clear-cut categories and “places where separate indigenous neighborhoods or enslaved peoples’ quarters can be identified” (Lightfoot 2015:9216,9217). What the concept of plurality does is give a framework for understanding the fact that, even though individual *archaeological* contexts (such as features, dwellings, or communities) may have been nominally homogeneous, these were produced in a social context organized by ideologies of difference. The increasing spatial segregation of plantations in 17th-century Virginia marks an effort to draw distinctions among people, rather than an impulse to match like with like. The social categories of that time and place: Christian, negro, servant, planter were tools of division, not solidarity. And furthermore, they were tools for mediating a profoundly plural social landscape.

In the Chesapeake colonies of the 17th century, where the local pipe tradition flourished, society was

in flux. Virginians had engaged in the international trade in bound labor from the outset. Some persons were owned for a term, others for their entire lives along with future generations. The distinction hinged largely on a nascent idea of race in the colony. This strategy for reckoning difference remains and shapes efforts to understand the archaeological record.

If culture were still thought about in the old way, and cultural difference as the product of isolation rather than interaction, then it would make sense for us as archaeologists to try to identify patterns or markers in so-called isolated social contexts, in part so that they may be used to tease apart other, plural contexts into their smaller constituent (homogeneous) parts. But these smaller constituent parts did not really exist, or, if they did exist, they are far less important for us than the archaeological contexts to which we do have access.

An archaeology that wants to understand African diaspora-ness as a quality, rather than a relation or a process, would need to establish the relationship between the characteristics of artifacts and the characteristics of the people who made, used, and discarded them. Hence, the search for pure contexts. I find that the ideas of pragmatism act as a counterweight to the more familiar and comfortable grooves of tradition (Agbe-Davies 2017).

As I will outline here, pragmatism helps archaeologists cope with a plurality that does not always manifest as neatly segregated spaces and firmly established social categories. One of the reasons that pragmatism is important for this work is that it concerns itself less with semantic meaning (comparisons between abstractions or a dyadic relationship between a sign and its object), than with pragmatic meanings (consequences in the world). Pragmatist philosopher and polymath C. S. Peirce accomplished this, in part, by converting the dyad into a triad that includes “Sign,” “Object,” and “Interpretant.” His model included not only the sign and its referent, but also the effect of the sign in the world. (Peirce 1994a; Preucel 2006; Bauer 2014; Agbe-Davies 2016).

An American philosophical tradition that emerged in the 19th century, pragmatism is enjoying a renaissance of sorts and has had a notable impact on archaeological thought in recent years. It can be a tool for thinking about, for example, the consequences of archaeology for living people, the practical applications of archaeological knowledge, and the archaeologist as bricoleur, among other things (Gaffney and Gaffney 1987; Reid

and Whittlesey 1998:276; Jeppson 2001; McDavid 2002; Saitta 2003; Preucel and Mrozowski 2010; Mrozowski 2012). What I emphasize here is pragmatism as an orientation toward knowledge, as a *method* for archaeologists. McDavid explains what these methods would look like with respect to the design and implementation of public archaeology projects:

The pragmatic move demands that we accept the risk of uncertainty and maintains that we cannot wait to talk about painful issues until we are certain that we are not being racist, classist, or otherwise oppressive. It asserts that truths will emerge within the process of looking for them. (McDavid 2007:69)

Pragmatism offers some interesting tools that an archaeologist might use to think about labor and social relations in plural contexts. This article illustrates the application of these tools with examples using an archetypically marked artifact class: Chesapeake-made clay tobacco pipes, which archaeologists have used to spend so much time talking about “race” and so little about “work.”

Case Study

The locally made pipes of the colonial Chesapeake have been the subject of extensive discussion with respect to their makers and the origins of these makers (for a full review, see Agbe-Davies [2015]). J. C. Harrington in “Tobacco Pipes from Jamestown” suggested that these 17th-century artifacts may have been made by “white men” using “Indian” techniques (Harrington 1951). Several of his contemporaries emphasized the pipes’ similarity to examples made by native North Americans before European settlement (McCrery 1968; MacCord 1969). Matthew Emerson introduced the possibility that the pipes bore decorative motifs found in West African societies (Emerson 1988, 1999). The vigorous rejection of this thesis, e.g., Magoon (1999) and Mouer et al. (1999), shows how deeply important this question of who made the pipes (and which dimensions of “whoness” matter) remains for the archaeological project. Some studies have bracketed the question of the ethnic affiliation of the pipe makers, e.g., Henry (1979), Neiman and King (1999), and Luckenbach et al.

(2002). Other recent work has sought to explain how these artifacts may have functioned, not in isolation, as remnants of earlier practices, but as tools for engaging with a pluralistic and deeply hierarchical colonial setting (Monroe 2002; Sikes 2008; Bollwerk 2012). The present article is not an argument about the pipes, so much as an argument about archaeological method using an existing study of pipes for illustrative purposes. Readers who are interested in how the larger project engages with the other studies are referred to Agbe-Davies (2015).

Many of the arguments about who made the pipes—for whom they had meaning—emphasized the formal variation and surface decoration of these artifacts, matters of what many would call “style.” The meaning of the pipes, then, was a function of the historical, arbitrary—law-like, even—association of pipes and styles (signs) with abstract ideas (objects) within a particular system of meanings. In other words, they were/are symbols, as opposed to icons or indices, as discussed under “Indexicality,” below (Peirce 1994a). The tools and terminology for thinking about such meanings come from Peirce’s semiotics. His science of signs is a single aspect of the larger philosophical framework of pragmatism, which Peirce may or may not have founded.¹

Among pragmatism’s contributions to archaeology is a method for applying techniques to work through the problems that archaeologists’ theoretical models set up. Archaeology’s techniques have advanced considerably since Kluckhohn’s time. Developments in allied sciences, ever more nuanced approaches to context, and the power of computers to store, retrieve, and analyze data have revolutionized field and laboratory techniques. Likewise, the theoretical tool kit with which human social behavior is approached has been enriched by insights from such fields as critical theory, feminism, and evolutionary theory. Archaeologists of the African diaspora, in particular, have found inspiration in concepts such as intersectionality, agency, praxis, habitus, and place, among others. What is sometimes missing is that bridging element, the method, the perspective we archaeologists bring to the research, how we make sense

¹ The name “pragmatism” comes from Peirce’s colleague William James, who credits Peirce as his inspiration (James 1907). Peirce became increasingly disenchanted with applications of his ideas and tried to rebrand his approach as “pragmaticism,” a word which he hoped was “ugly enough to be safe from kidnappers” (Peirce 1994d:414).

of the archaeological record—how we decide what constitutes data.

Pragmatism provides an orientation toward data and knowledge that aligns nicely with archaeology’s particular strengths and provides ways to exploit rich data sets without negating or undermining sophisticated social theory. Singleton and Bograd remarked some time ago that the data of African diaspora archaeology had long since outpaced theory (Singleton and Bograd 1995:29). It seems to me that theory has managed to catch up, and what is now needed are methodological frameworks to tie data and theory together. So, to my mind, pragmatism is not a new way of excavating (technique) or a new interpretive framework (theory), but another way of seeing/using excavation data (method). The four concepts that I discuss here are not ideas about (people in) “the past,” but about ourselves—the archaeologists—and our own practice. Again, the themes are problems, indexicality, induction, and consequences—all elements drawn from the pragmatist’s way of engaging with knowledge and the world.

Problems

I return frequently to a remark Peirce (1994e:259) made in a letter to William James: “Pragmatism solves no real problem. It only shows that the supposed problems are not real problems.” We archaeologists who study the African diaspora can choose to investigate what made African American cultures distinctive or the origins of the practices that left traces in the material record. But are these our best or only problems? Our theory acknowledges that identities are produced and contextual, yet our method is predicated on histories of essential difference. Recognizing that people lived and worked in plural contexts both demands and facilitates a new methodological approach.

The customary method of seeking to identify distinctiveness or origins needs isolated contexts and parent traditions. It treats plural contexts as the sum of their parts, despite the fact that many archaeologists work with a version of Fredrik Barth’s idea of ethnic groups as products of *interaction*, rather than isolation (Barth 1969). The logical consequence of Barth’s formulation is that plural contexts are the very place to look for ethnicity as process. Ideas similar to Barth’s are found in H. Martin Wobst’s (1977) classic analysis of ethnic costume. The trappings of ethnicity are most meaningful

in settings in which difference is being produced and maintained.

We archaeologists could continue to ask ourselves: “To what (ethnic) groups did these people belong?” or “What are the origins of their practices?” But a pragmatic method marshals archaeological techniques to answer questions, such as: “What was the context of interaction like?” and “What were these people trying to do?” and “How can we use this knowledge of the past to act now?” So, for the pragmatist, the problem is not one of tradition or continuity, but purpose. Not from where did decorative motifs come or what the ethnicity/race of a maker/smoker was, but how pipe making (who controlled the process) and use (how people came to possess the pipes that they did) are related to power, especially the power to control work. If we are interested in exploring social relations with the pipes rather than social identities, then it is more important—or at least as important—to examine contexts in which these objects may have been made, rather than places where we can pin down the composition of the plantation workforce (Table 1).

The written record is clear: plantations were plural spaces. Colonial elites could not have built their fortunes in Virginia without bonded laborers—people bound either for a term or (as often recorded in period texts) “forever.” Richard Kemp assembled his plantation at Rich Neck with headrights on people like “Henry Fenton, Thomas Cooke, Robert Sumers, John How, George Harrison, Francisco, Mingo, Maria, Mathew, Peter, Cosse, old Gereene, Bass, young Peter, Paule,

[and] Emmanuell, Negroes” (Nugent 1934:104). John Page “dye[d] possessed of” an unspecified number of “Negroes or slaves” (Dorman 1976:62), yet also was an avid user of indentured laborers, who appear from their names to have been arriving from England or elsewhere in the British Isles, as well as a seven-year-old “Indyan boy called Jacke” (York County Deeds, Orders, Wills 1633–1815:4.154,157,279, 5.27). Philip Ludwell, a later owner of Rich Neck, disputed the terms of Robin Santy’s bondage (McCartney and Walsh 2000:71), no doubt relying on the fact of Santy’s African heritage to withhold freedom.

These men’s farms in Middle Plantation (now Williamsburg, Virginia) were inhabited by people with vastly different origins—plural contexts par excellence. Unlike that of later centuries, the spatial organization of this difference is not entirely clear. Does this fact preclude archaeologists from finding meaning in the pipes these laborers smoked and, in some cases, made? Distributional analysis—within plantation complexes—shows Chesapeake-made pipes in spaces associated with the owned, rather than the owners (Neiman and King 1999). Analysis of the technological and decorative style of the pipes—across plantations—suggests that elites, for all their domination of other economic sectors, had little power over the pipe trade (Agbe-Davies 2004, 2010, 2015).

The individual plantations and the colony itself were plural contexts, yet that fact does not constrain archaeologists from saying meaningful things about these perplexing artifacts. The solution is not better precision

Table 1 Pipe assemblages included in the present study

Site Name	Number of Pipe Fragments	Features Included/Interpreted Function	Date Range
Green Spring	601	Manor house, outbuildings, kiln	ca. 1643–1700
Drummond	862	Outbuilding cellar, kiln, sawpit, possible privy	ca. 1650–1680
Rich Neck	1543	Borrow pit/pond	ca. 1665–1704
Page	160	Manor house, outbuildings, brick kiln, borrow pit	ca. 1662–1720
Port Anne	517	Borrow pit	ca. 1650–1700
Structure 26/27	108	Warehouse, pottery kiln	ca. 1650–1700
Structure 127	83	Brick clamp/kiln	ca. 1620–1680
Structure 100	233	Retaining wall	ca. 1640–1680
Structure 19	221	Tavern(?), dwelling house(?)	ca. 1650–1710
Structure 112	266	Dwelling/Statehouse	ca. 1620–1690
Structure 144	378	Dwelling/Statehouse	ca. 1664–1698

Note: The study summarized here included pipes from 11 different archaeological sites; all “Structures” are at Jamestown; for details, see Agbe-Davies (2015).

or resolution regarding who inhabited these spaces, or irrefutable links with one or another artistic tradition, but in identifying new problems. William James saw the pragmatic method as “primarily a method of settling metaphysical disputes that otherwise might be interminable” (James 1907:45), as indeed the dispute over the ethnicity or race of local pipe makers and smokers might be characterized.

New problems mean that we archaeologists probably need to collect new data. Clearly, current theoretical concepts foreclose the interpretation that “artifact bearing [ethnic group’s] style=[ethnic group] people.” Decorative motifs on the pipes, because they are socially learned, can be vehicles of tradition; they are also polyvalent (Monroe 2002; Sikes 2008), meaning many things to many viewers. So the simple presence of a motif is insufficient to demonstrate the involvement of any particular group in the formation of the archaeological record. If we take as our problem what these decorative motifs indicate (what they index), instead of what the motifs mean in a symbolic sense (or even more tenuously, of what symbol system they may be a part), we can see, for example, the production of similarly decorated pipes with widely varying technologies (Agbe-Davies 2015:50–55), suggesting that pipe makers were familiar with one another’s work, but working under different conditions with different raw materials and equipment. Pipes that appear at first glance to be “the same,” in fact have very different cultural biographies (Kopytoff 1986), as do their makers and smokers. With attention to the work of making and circulating the pipes, with a method for thinking about them, the meanings of the decorations can become more clear. And if, for example, we want to know what the pipes reveal about power in these plural contexts, we realize that it is more important to know the distribution, proportion, and manner of rendering the decorative motifs than it is to know about their presence or absence.

Furthermore, for these new problems, it is more important to examine technological and metric traits of pipes than decorative motifs. Again, pragmatism is a perspective that asks what *is* the problem? If the problem of the pipes is how people made and circulated them, then an exclusive focus on decorative style will only get archaeologists so far. Technological attributes allow one to identify technologies and tools, such as molds and “pipe engines,” as well as techniques, such as burnishing vs. smoothing. They even help to identify tools for creating decorative motifs. The marks made by

these tools—because they are indices (see “Indexicality,” below) of action, rather than consciously or unconsciously imitated symbols—more directly track specific processes of manufacture, whether these indicate an individual or a workshop. Metric traits, which get at individual makers and specific tool kits (Alvey et al. 1985; Eerkens and Bettinger 2001; Agbe-Davies 2015:94–97,103–104,136), help to pin down “who” was making the pipes in terms of “which person or group of co-laborers,” rather than “members of which ethnic or racial group.” A focus on technological and metric attributes, furthermore, allows one to analyze samples that are larger and more statistically robust than those requiring decoration—which occur on less than a quarter of the nearly 5,000 fragments in a sample of local pipes (Table 1). Sample size is a significant issue if decorative attributes are used to identify artifact types, rather than modes (for modes, see Rouse [1939, 1971]; for the application to pipes, see Agbe-Davies [2015:43–45,54–56]).

What the analyses sketched out here have in common is the premise that there are many kinds of problems to tackle with the archaeological record. Furthermore, these problems drive techniques, not vice versa. We archaeologists advance knowledge by identifying new problems to solve as surely as we do by refining or adapting our approaches to old ones.

Indexicality

Peirce’s strategy for thinking about signs includes a three-way division among icons, indices, and symbols (Peirce 1994a). An icon is a sign that is related to its object by resemblance. For example, a ☺ signifies concepts, such as friendliness or happiness, because it resembles a smiling (and, therefore, friendly or happy) face. A symbol is related to its object by law or convention. For example, there is no necessary or natural relationship between the utterance “tree” and a tall woody plant. In other languages that same object is signified by “árbol,” “igi,” or “strom.” An index, however, is related to its object by co-presence or effect. For example, charring on the interior of a pipe bowl is likely a sign of its having been smoked.

Now, think about a pipe as a sign. To the extent that it may signify “African-ness” or “Indian-ness” (or “English-ness,” for that matter), this signification is symbolic and is occurring in our own time. It may have

occurred in the past as well, but additional evidence beside the symbol itself is needed to establish that fact (Fig. 1). To do otherwise violates the theories used to understand the transmission of culture, the social construction of identity, etc. Archaeologists know that an essential, one-to-one relationship between people and material culture, explicitly or implicitly, cannot be relied upon. To paraphrase Cruz, “pipes are pipes, not people.” It is furthermore difficult to imagine a realistic archaeological proof of arguments about which people made or used local pipes, given the data archaeologists have to work with. However, as has just been seen, archaeologists are not limited to such arguments.

Conscious choices, such as the symbolic content of decorations, would have semantic meanings, such as those identified by Emerson (1999), Mouer et al. (1999), and Monroe (2002). But the *unconscious* choices—what James Sackett has called “isochrestic variation” (Sackett 1990)—with indexical content, have pragmatic meanings. In *How to Do Things with Words* (Austin 1962), linguist J. L. Austin explored the ways in which utterances act in the world, rather than only pointing to it or representing it. Austin’s linguistic pragmatics explored the meanings of statements in terms of what speakers were doing with their utterances, aside from the semantic content of their speech. Some words and utterances mean something, yes, but they also *do* something—christen a ship, for instance (Austin 1962:116). My point is that archaeologists are well positioned to discover how people in the past did things with things, arguably more so than they are to discover how people may have said things with things.

Instead of worrying about what someone may have been using the pipes to try to communicate (including information about identity), archaeologists can think about what the person may have been trying to *do*. Archaeologists are good at the latter because at least some meanings of an act (which, arguably, is a kind of “utterance”) derive from its context. In this case the context is an archaeological pattern of diversity within sites’ pipe assemblages, especially a technological diversity that represents not trial and error, but the hands of many well-equipped and practiced pipe makers among the pipes recovered from a single plantation (Agbe-Davies 2004, 2015).

Consider just the sites with fully excavated kilns: Page, Green Spring, and Jamestown Structures 26/27 and 127. Each of the features is a standard-issue 17th-century kiln: one for pottery, one for pottery and tile, and

two brick kilns. The pipes from Page and from Jamestown Structure 127—the brick kilns—have a coherent look, but from a technical perspective are relatively unstandardized, whereas the pipes from Structure 26/27 (pottery) and Green Spring (pottery and tile) much more closely resemble imported pipes and show greater use of specialized tools (Fig. 2).

The contrast has implications for what archaeologists think about the organization of labor in early Virginia. For example, how did these various production scenarios fit into the plantation regime? The technological characteristics of the pipes seen in this small sample seem to more closely index the type of ceramic production facility than they do the structure of labor relationships or the site’s location in an agricultural vs. a semi-urban setting. Furthermore, the laboring conditions at each of the sites differ physically from the classic forms of pipe workshops described in European texts of the 17th and 18th centuries, an index of the organization of work in pipe manufacture. Although the contemporaneous literature mentions pipes being made by other craftspeople (bakers, etc.) (Walker 1977:183,251), it emphasizes dedicated pipe makers, using specialized kilns, who produced only pipes. And, of course, the production of pipes, by its very focus on craft as opposed to agricultural production, diverges from the typical model for commodity production in Virginia, again broadening the understanding of labor in the colony.

The emphasis on indexicality is important for us as archaeologists because it allows us to play to our strengths. Actions, arguably, have greater archaeological visibility than ideas (Fig. 3a, b). Furthermore, indexical meaning is less dependent on attributing actions to a particular person or group (so complicated in these plural contexts). This is because the pragmatist’s interest is in the context of the signifying event, rather than the idea supposedly behind the speaker’s utterance. Instead of explaining pattern by reference to symbolism, as understood via texts or other decoding testimony, to get at past action the archaeologist identifies pattern and interprets it in light of other *archaeological* data, such as provenience, distribution, or association. As historical archaeologists, we have access to texts, but to avoid using them as a crutch or becoming history’s “handmaiden,” we would do well to exploit fully the range of material meanings available to us, rather than focusing so intently on an artifact’s symbolic content. The solution does not require that we ignore the written record, only that we become aware of and play to the

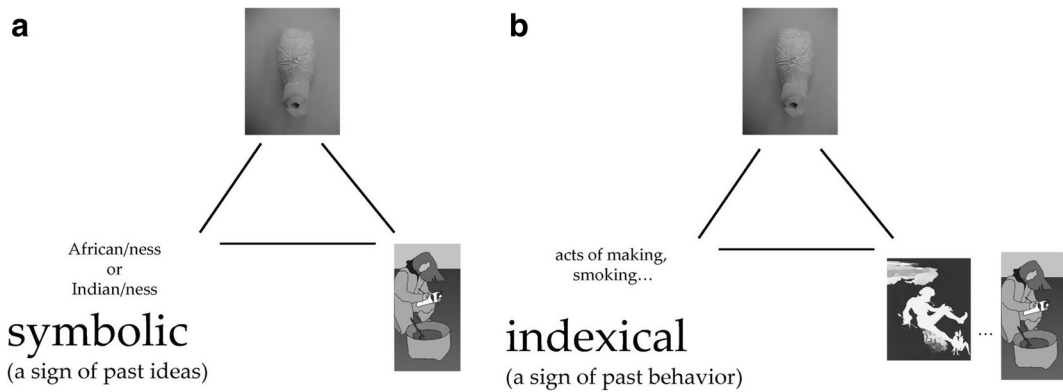


Fig. 1 Symbols and indices are different kinds of signs (apex of the triangle), with different relationships to their objects (*lower left*), and to their interpretants (*lower right*): (a) is a model of the debate about the degree to which the decorations on local pipes resemble Native American or African repertoires; and (b) is a

model of what a pipe might signify, either to a person in the past or to an archaeologist. (Artwork, *Untitled 2009*, cut paper and collage on paper, by Kara Walker; courtesy Sikkema Jenkins & Co., New York, New York; figure by author, 2016.)

strengths of our archaeological data set—something that an explicit emphasis on indexical meaning facilitates.

Induction

For years, we archaeologists have been working with a model of scientific archaeological research referred to as (hypothetico-) deductive (Binford 1968; South 1977).

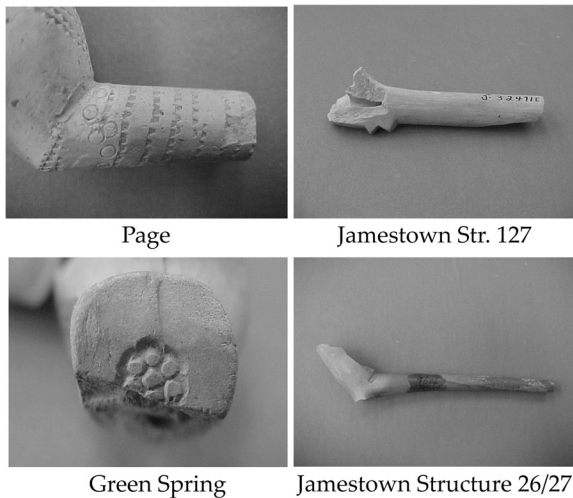


Fig. 2 The pipes from Page and Jamestown Structure 127 (both brick kilns) exhibited some unusual features, such as dentate tool marks made at an angle (Page, *upper left*), and hand-cut, angular heels (Str. 127, *upper right*). The Green Spring and Structure 26/27 pipes look more like imported pipes, with mold scars and stamped-heel motifs (Green Spring, *lower left*), as well as flat heels and restrained rouletting (Str. 26/27, *lower right*). (Figure by author, 2016.)

With deduction, “the force of an explanation derives from its demonstration that the phenomenon to be explained is an instance of an established lawlike regularity that is presumed to be universal and invariant (nomological) for such phenomena” (Wylie 2002:72). Because antiquated notions of artifacts as markers to establish law-like regularities cannot be depended upon, historical archaeologists often turn to texts for the foundations from which to develop deductive arguments. This practice seems to have the unfortunate consequence of reinforcing archaeology’s handmaiden status. But, by making texts the key (the “decoding code” in Fig. 3b) for the understanding of the meaning of material culture, we treat the problem of our data as one of translation, rather than interpretation. Elsewhere, I have questioned the devotion to deduction (Agbe-Davies 2017), in part because the raw material for induction—empirical observations—is so rich and complex, and it constitutes a resource particular to archaeology as a discipline. The temptation in the presence of texts is to use the artifacts and other archaeological data as illustrations or examples within text-based deductive arguments, rather than as opportunities to inductively derive “knowledge from empirical evidence based on a *system of handling sense data* [emphasis added]” (Samuels 2000:214), in other words, a “method.” From the pragmatist perspective, after all, deduction is only one part of the scientific process; see also Reid and Whittlesey (1998), Leaf (2003), Baert (2005), and Archer and Bartoy (2006). Table 2 offers a breakdown of the relationships among deduction, induction, and abduction.

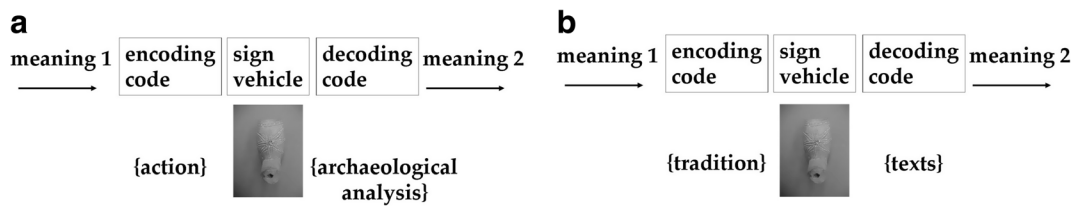


Fig. 3 (a) An autonomous (or at least self-directed) archaeology uses archaeological analysis to understand the archaeological remnants of past actions; (b) a “handmaidenly” archaeology relies on

texts to understand the traditional or symbolic meaning of archaeological materials. (Figure by author, 2016.)

Timo Järvensivu and Jan-Åke Törnroos (Järvensivu and Törnroos 2010:102) laid out a model of case-study research that they characterize as generally abductive, but having phases where deductive, inductive, and abductive reasoning are dominant (Fig. 4). John Sowa (2006:78–79) described a “cycle of pragmatism” in which one is in continual movement through stages of induction, abduction, deduction, and action (Fig. 5). Peirce, who thought in triads rather than cycles, stated that

Deduction proceeds from Rule and Case to Result; it is the formula of Volition. Induction proceeds from Case and Result to Rule; it is the formula of the formation of a habit or general conception—a process which, psychologically as well as logically, depends on the repetition of instances or sensations. Hypothesis [i.e., abduction] proceeds from Rule and Result to Case; it is the formula of the acquirement of secondary sensation—a process by which a confused concatenation of predicates is brought into order under a synthesizing predicate. (Peirce 1994c:712)

The relationships Peirce describes might be illustrated as shown in Fig. 6. As each of the models in

Figs. 4, 5, and 6 shows, induction alone is insufficient, but, so too is deduction alone. I argue for renewed attention to these other processes of knowledge production, now ghosts of their former selves.

What might an archaeology that encompasses more than a single form of inquiry look like? In addition to using knowledge to create models for making sense of observations, we archaeologists would be using observations to generate knowledge (Table 2) (Fig. 6). A deductive argument about Chesapeake-made clay tobacco pipes could be used to generate a prediction about the distribution of clay pipe styles:

Rule: Objects made by socially connected producers share observable characteristics
 Case: 17th-century Virginia was a pluralistic colony with potential producers drawing on several traditions
 Result: Therefore, pipes will exhibit a mix of attributes, perhaps in novel combinations

Wedged into a deductive framework, at best archaeology is capable of merely confirming what we already know, based on prior research, about social and economic relations in 17th-century Virginia. And when evidence emerges to the contrary, it is hardly sufficient to transform our thinking about life in the early colony.

Table 2 The processes of deduction, induction, and abduction

	Process	Has to Do with
Deduction	Conclusions based on premises using a system of logic	Validity (conclusions properly derived from premises)
Induction	Knowledge from experience, based on a system of handling sense data	Putative truth (correct descriptions/explanations)
Abduction	Guesses about the causes of the thing observed and their continuous revision	Conjecture and discovery (what is actually going on)

Note: The relationships among deduction, induction, and abduction, as described by Warren Samuels (2000:214–215): Induction and deduction are likely familiar to most readers. Abduction is “a method of forming a general prediction without any positive assurance that it will succeed either in the special case or usually, its justification being that it is the only possible hope of regulating our future conduct rationally, and that induction from past experience gives us strong encouragement to hope that it will be successful in the future” (Peirce 1994a:270).

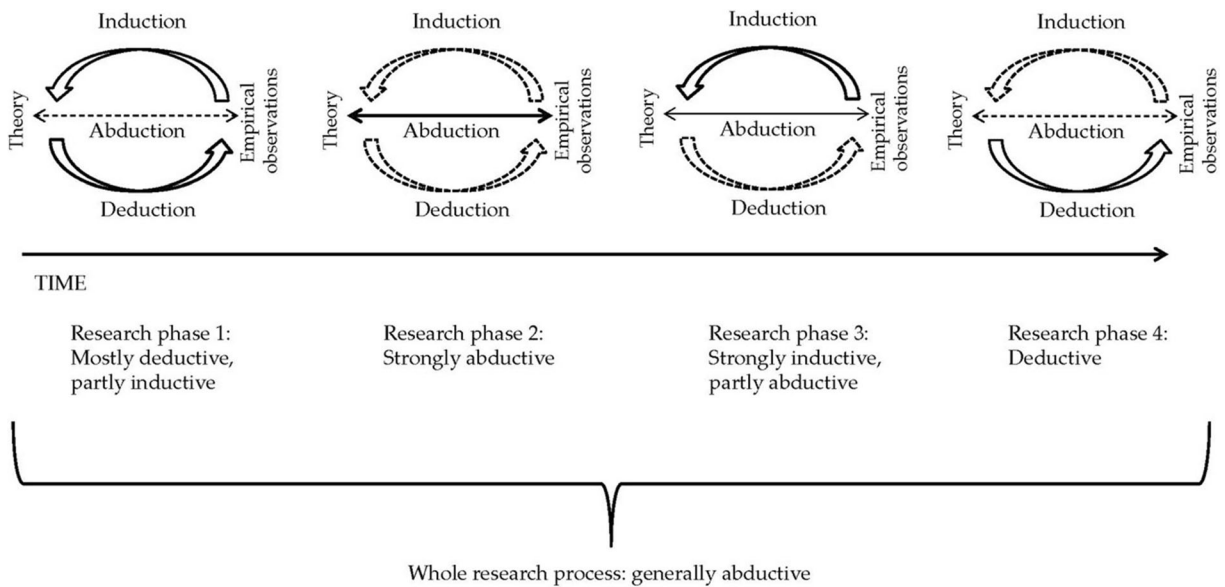


Fig. 4 Each of the three aspects of scientific thought discussed in the text—deduction, induction, and abduction—is a necessary contributor to the production of knowledge. Each, however, dominates at a different moment in the process. The process as a whole

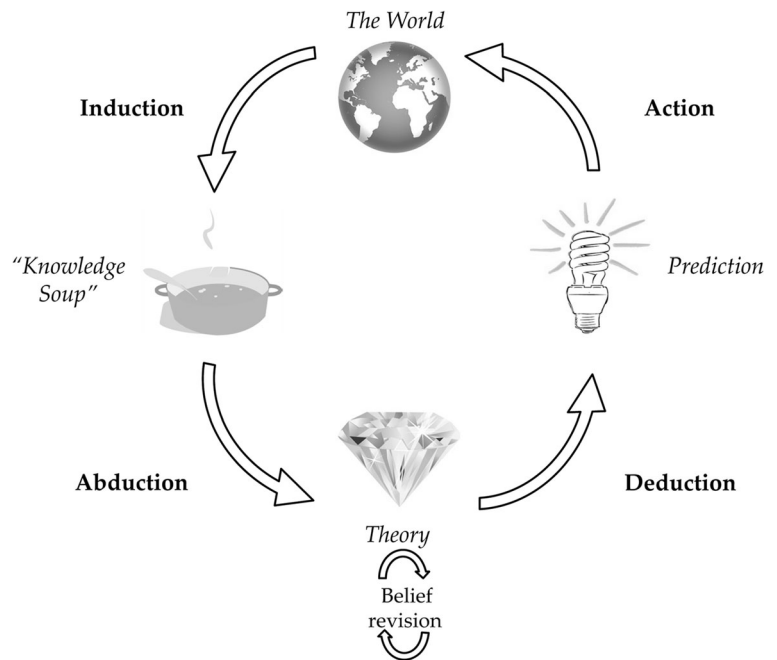
is abductive, aiming to increase understanding of what is actually going on. (Figure adapted from Järvensivu and Törnroos [2010: figure 3] by author, 2016.)

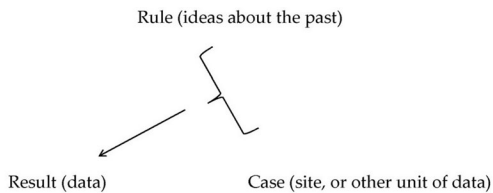
We are hard pressed to contribute new knowledge about the facts of plurality and inequality in that context.

So what would an inductive argument look like? The techniques that allow archaeologists to produce knowledge through a system of handling sense data include modal analysis—the trait-by-trait, sequential analysis of

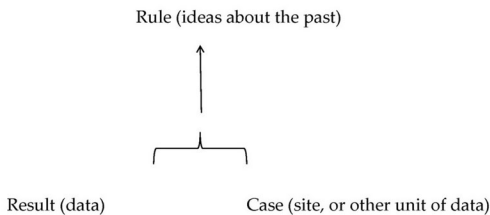
nonmetric attributes (Agbe-Davies 2015:54–67). This technique facilitates the comparison of attribute frequency within and between sites, as well as comparisons among site categories (urban vs. rural, sites grouped by proximity, and sites owned by allied and antagonistic elites). The results show that pipe makers were not

Fig. 5 Knowledge comes from the world, but science, at its best, provides information with which people can act on the world. This figure illustrates the continuous nature of the pursuit of understanding as “The Cycle of Pragmatism.” (Figure adapted from Sowa [2006:figure 5] by author, 2016.)

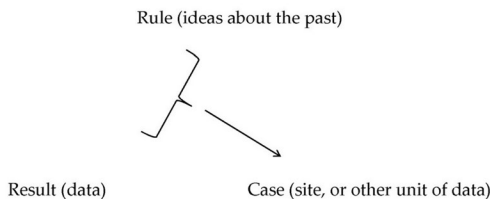




deduction



induction



abduction

Fig. 6 Each of the three aspects of scientific thought involves relations among rules, results, and cases. What differs is the nature of the relation. (Figure by author, 2016.)

restricted to Jamestown, the colony’s commercial and administrative center, nor to the plantations, where tobacco was being produced for export as well as for extensive local use. Together with metric attributes, the data revealed specialized production and standardization, but not uniformity within sites:

Case: Pipes show evidence (metric and non-metric) of standardization and specialized production.

Result: The attributes that could distinguish specific makers are found at multiple sites.

Rule: Locally made pipes were exchanged across early colonial plantations and towns.

Finally, although labor-owning elites controlled the trade in other manufactured products and commodities, the distribution of pipes did not reflect their social and economic alliances. Considered deductively, my initial hypothesis has been disproven. Working inductively, archaeologists can demonstrate *how* a system of bound

labor was remade daily, and also describe the mechanisms of its reproduction and subversion, setting the stage for the abductive conjecture and discovery.

The abductive argument is positioned to actually *do* something; it changes the ideas about work in the colony. It becomes the next link in the chain of signification:

Rule: Hierarchy is maintained through the domination of subordinate categories of person.

Result: Pipe production was controlled by and local pipes were smoked by subordinate persons in the colonial Chesapeake.

Case: Consider whether the demise of the local pipe tradition is due to the ways that pipes indexed the independence of makers and smokers.

What this analysis does is reframe the understanding of “what [was] actually going on” (Samuels 2000:217) in Virginia, as indentured servitude was being replaced by enslavement. Rather than explaining the demise of the local pipe tradition as the declining relevance of non-English symbol systems or increased segregation among different categories of laborer, there are now new hypotheses to test. The pipes, regardless of the source or content of their style, signified power.

Thus, the three processes together (deduction, induction, and abduction) move knowledge forward. The point is not to banish deductive reasoning, but to build up the other two, especially as induction—being so heavily empirical—plays to our strengths as archaeologists. Commenting on the mutual dependence of these three modes of thought, Sowa (2006:80) writes: “Even when logic is used, the methods of induction and abduction [in the cycle of pragmatism] are necessary for learning new knowledge and organizing it into the systematic theories required for deduction.” And, rather than stalling out at Järvensivu and Törnroos’s first circle (Fig. 5), the discipline can move forward. As Sowa (2006:80) also says, invoking Peirce: “[M]eanings grow as new information is received, new implications are derived, and new actions become possible.” So, finally, readers, we turn to action.

Consequences and a Conclusion

“Pragmatism,” colloquially, means a practical approach to problems. Likewise, in formal terms, it means that the consequences are the final measure of a thing (Peirce

1994b). There are several kinds of consequences. We archaeologists can ask ourselves, at various stages in the process of knowledge production, the questions posed by pragmatist philosophers. What should we *expect* next (Peirce)? What should we *believe* (James)? What should we *do* (John Dewey)? (Agbe-Davies 2016).

With a new orientation toward method, I came to understand that, unlike other industries or commodities, elites did not seem to control pipe production and distribution. This interpretation comes out of the archaeological data—the nonhierarchical, iterative analysis of material culture in context(s). Furthermore, the interpretation reveals something new about power in the colony. Here, meaning is located, not in essential qualities of material culture or persons or in pure contexts, but in observations of the traces of people at work on the world, trying to get something done, trying, in fact, to solve their *own* problems. We archaeologists might expect that the local clay-pipe tradition would have transformed as elite influence consolidated, that elites may have attempted to gain control of the industry or, alternately, stamp it out. We might believe that, for a time at least, these pipes were beneath the elite’s notice. We might then look for other areas of society and the economy beyond the elite gaze and bear witness, in our own deeply unequal times, to the limits of domination. Again, these are potential avenues for further exploration. They become the premises for new arguments about labor, plurality, and race, and their relation to power.

Archaeology has a full arsenal of theoretical concepts and techniques that Kluckhohn and Taylor (Taylor 1983:8) could not have imagined. What pragmatism does for me is stitch the theory and technique together in a way that highlights what is truly archaeological about the archaeology of slavery. It is not how we archaeologists think people are that is the problem (our theory), nor how we manipulate the material culture/data (our technique), but, rather, our understanding of what archaeology is/can be (our method) that sometimes holds us up: what counts as data, and how we use it. The ideas in this paper are not novel, but I think they bear repeating.

Pragmatism was an attractive philosophy to men like W.E.B. DuBois, Alain Locke, and Ralph W. Ellison, not because it was beautiful or true, but because it allowed them to do things in the world: to understand the society they lived in and the forces that shaped it; to inform public opinion and policy; and to guide their participation in the body politic (West 1989; Muller 1992; Harris

1999). If archaeology is to make a difference, as these men hoped that sociology, the fine arts, and literature would, we archaeologists need to contribute new knowledge that only archaeology can. Living with these pipes for more years than I care to count has shown me that these artifacts were made and used under the noses of the elite, but escaped their otherwise fairly efficient exploitation of their contemporaries. The artifact analysis spawned a related project: trying to figure out how secure the elite hold on emergent racial and labor categories really was (Agbe-Davies 2015). The answers matter for how we think about power, bound labor, and, yes, race, in Virginia.

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