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STUDYING WITH FIELDWORKERS
Archaeology and Sociology

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Our study of fieldworkers emerges from the project outlined by this volume and a mutual interest in the role of discourse and writing in the creation of knowledge. We were curious about how scholars identify what is theirs and how these understandings inform their own citation practices and their teaching about plagiarism, questions we believe are intimately tied to issues of discipline-based epistemology. In other words, we were interested in how the language that other scholars use to talk about their subjects might embed the habits of mind and practices that animate scholarly work in those fields, including the ways that they understand processes of writing and traditions of citation. Like other chapter authors, then, we worked from a colloquial understanding of intellectual ownership, as opposed to a legalistic definition of intellectual property (IP). Our data suggest, however, that epistemology and IP may be complexly entailed; they also suggest that the roles that these relationships play in defining plagiarism may be fairly invisible, even for active scholar-teachers.

We initially intended to investigate two disciplines of interest: sociology and anthropology. Almost immediately, however, the subset of "fieldworker" emerged, crossing both fields and raising interesting questions. Thus, although both anthropology and sociology include a wide range of scholarly fields and approaches, we chose to focus on scholarship that is conducted in or with physical sites and populations: our interviews

centered on archaeologists and ethnographers who work literally "in the field."

In one sense, outsiders might imagine that fieldworkers almost have a bye with intellectual property and ownership questions because they are the first persons to study their specific scenes. Although they certainly draw on other scholars as they report, situate, and interpret their findings, they are the first to plant their shovels in a particular section of dirt or to pose a particular question to a community, and thus they may seem to be part of a small group of scholars who do truly "original" investigation. But defining ownership as "seeing something first" is not quite so simple. Our research shows that negotiating ownership in fieldwork is complicated by the inherently collaborative nature of work, by ethical considerations specific to disciplinary practices, by the legal negotiations of property rights demanded of "first observer" work, and by the larger politics of academic work. Most notably, while each of these factors may be named independently, their operations are intertwined and interdependent. That what may be owned and how it may be owned varies broadly across fields and studies points to the inadequacy of writing pedagogies that offer simple "plagiarism rules."

OUR STUDY

We interviewed twelve subjects, six in archaeology and six in sociology, analyzed our data, and then followed up with additional questions in order to clarify and flesh out observations. We also consulted the emerging literature on IP in these fields in order to more thoroughly situate our informants' responses. Our composing processes included asking our informants to comment on drafts of this chapter. Although our subject sample size is small, the questions our informants posed and the specific practices they illuminate offer important insights into the ways faculty scholars typically understand and teach students about intellectual property, ownership, and plagiarism.

Broadly speaking, we found three common factors that characterize our informants' responses: (1) the items they mention

first when asked to name what they own, (2) the interactions and sometimes strained relations they noted between ownership, writing, and publication, and (3) the collaborative nature of their scholarly activities, which call into question their definitions of plagiarism. In the following sections, we consider each of these responses in detail, concluding with some reflections on this study's implications for teaching about plagiarism.

WHAT FIELDWORKERS OWN

Perhaps the most intriguing of our findings is what this group of fieldworkers describes as owning. When asked, all of them, regardless of field, responded first in terms of zones of study, rather than texts produced. For instance, archaeologists describe owning dig sites, and sociologists describe owning groups of people—populations or cultures. This close identification with their study sites echoes in fieldworkers' pronoun patterns, as we noted archaeologists referring to "our dig sites" and sociologists referring to "our populations."

Despite this deep sense of ownership, both groups also recognize their ownership as provisional, as negotiated for particular purposes and time frames and with specific restrictions on their activities within the sites. Archaeologists describe negotiations that stipulate in advance precisely where and how they may conduct studies such as excavations. Requesting access and finding funding to study a particular site is a typical first ownership step. They must, for example, receive permits from the government, tribe, or culture that holds jurisdiction over the dig site. These permits detail time frames, digging protocols, disposition of artifacts, and the reporting of findings. In many cases, they also require archaeologists to employ "watchers" to ensure that the terms of these agreements are followed. This provisional ownership, then, is sometimes described as stewardship: a limited and particularized right to explore a site, accompanied by very clear responsibilities to care for that site, its occupants, and the data or artifacts that emerge.

While such negotiations may sound like straightforward contractual issues, they are not. As Kohl et al. (1996) note, changing political conditions, such as the collapse of nation-states and ethnic boundary disputes, make negotiating stable proprietary rights difficult. In addition, collaborations among scholars also may involve fierce competition, which can take on additional complexity when they involve transnational efforts. Atwood (2005), for instance, describes the collision between the Peruvian archaeologist Ruth Shandy and Americans Jonathan Haas and Winifred Creamer over credit for their collaborative "shicra-bag" carbon dating technique; this dispute pitted native researchers' rights against those of non-native researchers and involved allegations of shoddy work, ethical lapses, "repackaging" data, and plagiarism. Likewise, Shanks (1999) details the very complicated litigation over copyrights for various "arrangements" or orderings of the Dead Sea Scroll fragments that had been discovered.

Sociologists, in contrast, report somewhat less complicated formal negotiations with heads of organizations or communities or with smaller groups of individuals, stating that Institutional Review Board requirements exert the most powerful controls. Although IRB requirements are institution-specific, protecting subjects or informants from both physical and psychological harm is a consistent concern. These researchers, particularly those who study small groups of participants, emphasize the importance of observing not only the legal requirements but also the less widely discussed ethics of fieldwork: "behaving well," using appropriate "manners," being respectful, being courteous, and "treading lightly." As will be discussed shortly, however, definitions of appropriate behavior and stance may vary, depending on a researcher's orientation to his or her work.

Our informants further note a growing recognition that legal considerations about what may be owned have become increasingly complicated as the products of research include not only artifacts or data but also knowledge. Nicholas and Bannister (2004) illuminate this as they consider ownership of traditional

"knowledge systems," "know-how," or "lifeways" that are uncovered through archaeological research. Standing alone, this knowledge may be of largely local value, but when it is commodified to predict climate patterns, improve farming techniques, or manufacture pharmaceuticals, it acquires significant intellectual and economic capital. As Nicholas and Bannister note, when the outcomes of archaeologists' knowledge discoveries are seen as merely charming curiosities, who owns them matters little. But when they are seen to have market value, ownership becomes contested for both economic and control reasons. The question this poses, they assert, is "which creativity is most deserving of protection, the laboratory manipulation or the original knowledge?" (2004, 340).

These observations point to the inseparability of epistemology, methodology, and legal ownership in fieldwork. Returning to the ethical obligation to "tread softly," we can see how being respectful may still pit the interests of outsider researchers against the rights and interests of study populations. As Battiste and Henderson (2000) note, for instance, determining the respectful and appropriate treatment of field sites and populations is complicated when Eurocentric legal frames that "treat all thought as a commodity in the artificial market" collide with indigenous views of property as "sacred ecological order" (145). Smith (2004) further illustrates this difficulty in her pursuit of an equitable solution. Acknowledging that work with subject populations is reciprocally informed and that the resulting research could not have been created by either party alone, she suggests that we understand archaeological work as "a kind of soup to which different people provide essential ingredients" (527). However, while all participants may have contributed to and have rights to the resulting soup, Smith also acknowledges that "there may be a 'chef'" (327), likely the PI or senior anthropologist. Thus, collaborators, even with the best intentions, may become stuck when their conflicting goals lead them to designate chef, sous-chef, and restaurateur statuses. Nicholas and Bannister make this point more candidly:

Although assessing intellectual contributions is a part of determining intellectual property ownership, the first one to fix the knowledge in tangible form or the last one to add an inventive step is best positioned to claim ownership rights; rarely is this an Indigenous knowledge holder. (2004, 528)

These kinds of concerns may be motivating a split among sociological fieldwork practices, one that reflects changing academic values and leads to different ways of framing the ownership of study subjects. According to our informants, some scholars are more likely to do more purely observational research while others gravitate toward participant-observer work. The differences between a more purely observational model and a more involved model of ethnography reflect, among other things, quite different ways of viewing what counts as trustworthy knowledge. For observational scholars, the academic value of "objectivity" retains primary power. Participant-observers, in contrast, believe that faith in the notion of objectivity is misplaced and that both scholarship and subject populations are better served when researchers self-consciously grapple with their own presences and biases in their work.

This latter approach reflects postmodern intellectual influences, including deconstruction and poststructuralism, as well as more overtly political strains of feminism and multiculturalism. One self-described feminist fieldworker, in fact, depicts traditional observational scholars as proceeding as though "observing subjects through a microscope," which she believes creates a "frankly patronizing" and "pseudo-objective" lens that casts the observers' cultures as normative and posits difference as deficit. In contrast, participant-observers self-consciously try to understand the culture under investigation within its own terms, a distinction our informant likened to the difference between "peering at the ants under the microscope" and "joining the ants to understand their sense of the scene." She observes that many feminist sociologists and sociologists of color, who have emerged in American sociology in significant

numbers only since the '60s, have now established their presences as field and policy workers and are successfully challenging traditional patronizing attitudes in order to ensure research that is fairer and more respectful to study subjects. She notes, for instance, that it was a female graduate student's challenge to the Zimbardo prison experiment that led to the establishment of IRB reviews to protect study subjects (http://www.stanford.edu/dept/news/pr/97/970108prisonexp.html).

Consistent with this concern for respect and the desire not to rewrite a study population from a one-up position, this informant also backs away from terms like "ownership" and "stewardship," remarking that they imply a paternal or colonial relationship with study participants. Instead, she describes herself as a "student of" or "one who is learning from" her subjects, adding that she and her subjects work to create a shared and constantly negotiated relationship both with the procedures that guide the research and with the data as they are gathered and interpreted. Elaborating, she says that encouraging participants to remain "in control" of their participation is essential if researchers are to observe appropriately "humble, respectful, and polite" research roles, a kind of engagement that Nicholas and Bannister describe as "negotiated practice" (2004, 346). Notably, however, this negotiated relationship does not result in co-ownership of resulting knowledge products.

Finally, all our informants comment on the obligation to report their findings, and not solely to contribute to disciplinary scholarship or to establish a publication record. Again, this obligation relates to an ethics of work that is intimately connected to questions of ownership and the responsibilities that accompany it. Thus, the imperative to publish is a direct result of the fact that when fieldworkers study a space, they alter it—by digging holes that can never be returned to their original states or by asking informants questions that potentially change how they see and think about their communities and relationships. As a result, such study sites can never again be studied as primary or untouched sites.

Moreover, archaeologists observe that the act of publication is important because it typically releases the physical site for others to study. According to our informants, neglecting this responsibility both would breach an ethical obligation to the culture and would likely restrict their abilities to study other sites. Indeed, in the United States, Kohl et al. (1996) report that the standards set by the Society of Professional Archaeologists dictate that any "right of primacy" an archaeologist might hold becomes "waived" if within ten years of completing a field project he or she does not submit a full scholarly report (S113). Thus, when archaeologists relinquish site ownership, they take on text ownership. These elements quickly make clear how complicated and even unsatisfactory the term "ownership" may be for this kind of research (and, perhaps, for other research as well), yet at the same time point to the ways that academics, at least, need to continue to think in terms of intellectual property and, indeed, challenge some of its seeming certainty.

Whether figured as stewardship or studentship, both conceptions of ownership differ significantly from that of textual scholars, who first think of the scholarship they publish when asked about what they own. Although they may do their work in "sites," that is, they may study texts, they rarely have exclusive access to those texts, and their work is expected to leave the physical sites unmarked. For example, when Shakespearean scholars study a text, their work may alter the state of Shakespearean scholarship as their reading practices affect the ways subsequent readers read—and thus may indeed "change" the text. But their readings do not alter the available physical text in that other scholars are able to study the same physical text in a way that subsequent archaeologists, for example, cannot return to the same physical site once shovels have been inserted into the soil. Indeed, when scholars study manuscripts or other rare texts, one of the responsibilities of librarians is to monitor writing implements and other threats to textual integrity in order to ensure that texts are appropriately preserved. Likewise, when scholars work with texts that are still

under copyright, the copyright holder owns them and researchers often must apply not only to use the texts but also to quote from them. However, these two ownership scenes also can overlap. For example, copyright negotiations in some ways resemble site licenses in that they are both specific and provisional, creating a kind of co-ownership of study scenes or materials, and Shakespearean scholars don't think of themselves as owning *Hamlet* but rather owning a reading of *Hamlet*. In addition, both kinds of ownership are subject to questions about whether cultural objects exist apart from lived experience as well as about whether texts irretrievably change as ways of examining them or of assembling or re-assembling them, in the case of editions or edited volumes, change. Nevertheless, the differences between these kinds of texts is worth noting as it challenges some of the expectations that "text workers" and interpreters have about their terms of their ownership.

HOW COLLABORATIVE OWNERSHIP IS ENACTED

While a first stage of ownership may involve negotiating access and terms of work with governing parties, site occupants, and study populations, the concept is further complicated for fieldworkers by the typically collaborative nature of data gathering and text authorship. This is especially true for archaeologists, who describe their work as "unavoidably collaborative." "The kind of work we do could never be done by a single person—because of both its volume and its complexity," reports one archaeologist. He chronicles a process that begins with writing grants and obtaining site permits, and continues through the practical aspects of transporting equipment and digging, recording, and caring for artifacts, to the conclusory activities of interpreting and "writing up" findings. Elaborating on the division of labor within the collaboration, this informant reports that because senior team members have established successful track records, they most often write the grant proposals and obtain site permits. Thereafter, depending on the size of the project, principal investigators or project directors oversee a

clear order of "collaborators," from associate directors to field experts to technical assistants to assorted students to "muscles" who transport equipment and dirt. Notably, while this hierarchy is largely determined by expertise, it also has been marked by gender. For instance, our informants note that historically, on-site fieldwork has been seen as a properly male occupation. Until the 1920s, U.S. women were typically conceived of as "white coat" scholars and were left to work "at home" or from a home base. This meant that men made discoveries, "saw things first," and exercised the initial interpretive lenses. Women were thus secondary data interpreters and largely relegated to support roles. According to our informants, this began to change in the 1920s as women first began joining the "beards, boots, and jeans" archaeology excavations. Even then, however, they most often participated in particular subfields such as plant analysis.

Sociology fieldworkers also often work collaboratively. In fact, our sociology informants corroborate the assertion of researchers such as Gudeman and Rivera (1993), who state that ethnography is "a way of learning and conversing" (245) that involves both researchers and study populations in reciprocal discovery and interpretation. Like archaeologists, the sociologists we interviewed mention that other contributors, including students, may assist in gathering data and writing up field notes and that the contributions of statisticians and transcribers are essential to their data analyses as well. However, they describe less complex hierarchies in their collaborative projects than do archaeologists, partly because they tend to work with smaller teams. Moreover, most express a desire to reduce hierarchy within collaboration, although they also note that the role of primary investigator, and thus coordinator, of a project invites top down decision making and interpretation.

These enactments of collaboration raise interesting questions about where, how, and by whom "knowledge making" occurs. That primary investigators are knowledge makers is unlikely to be questioned, but when and how the various other contributors (diggers, catalogers, statisticians, transcribers, writers

of field notes) might be considered such seems less clear and, along with Smith's (2004) metaphor of the soup and its chef, suggests that the relationship between data and "discovery" is a viable site of study itself.

Moreover, the relationship between data, discovery, and ownership further points to some of the complexities of co-authorship. Perhaps most significant is the language that our informants use to describe text production: almost all those we interviewed describe this as "writing up" the research. In other words, these written texts, which appear as books, chapters, journal articles, or other publications, are generally thought of as "reporting" what was "discovered" in the field. Thus writing seems separated from research and thus potentially from knowledge making.

This separation may help explain the pragmatic ways that co-authoring is often approached. When asked more specifically how this "writing up" takes place, each participant offers some version of, "Well, we procrastinate and stew for a while, and then one of us says, 'OK, I'll get it started.' Then the manuscript circulates [among the major authors] until it's finished." Uniformly, however, informants have to stop to think about how to describe this "writing up process," suggesting that their practices are fairly unexamined habits of mind. Nevertheless, all agree that, generally, authorship is determined by whoever does "the bulk of the writing," the contribution to the writing determining authorial order, with multiple credits noted for other contributors, such as statisticians or technical consultants. According to our informants, the PI who proposed and arranged for the study tends to do the most substantive writing and thus is "naturally" listed as first author. However, in some cases, another researcher may take the writing lead and may be listed first, even though the study did not "belong" to that particular researcher.

There are, of course, occasions where investigators see their roles as mutual. For instance, informants who collaborate regularly with the same colleagues note that sometimes they simply

alternate first authorship, reflecting their ongoing collaborative work. Finally, two informants note that sometimes graduate assistants, lab assistants, or other specialists write sections that the "writers" then incorporate. If these sections are substantive, these assistants become co-authors; if not, they receive credit in footnotes or in project reports.

Obviously, then, authorship is a highly negotiated and collaborative space. However, these negotiations are not necessarily "routine" or peaceful. One senior archaeologist describes his "coming of age" at a time when anthropologists followed the German university tradition of granting first author status to senior researchers, regardless of their contributions to fieldwork, study, or writing. This practice left junior scholars late in the author list, in footnotes, or even unnamed. However, he notes a dramatic shift during his scholarly lifetime, a shift to giving younger scholars more credit—for their field contributions as well as their writing—to the point that they can become first authors much earlier than he and his cohort. Interestingly, he reports that this move is quite acceptable to many of his colleagues but continues to be criticized by journal editors who favor the more traditional author orders. Indeed, he notes that this has become a point of rancor at recent society meetings, suggesting some of the same questions about academic traditions and evolving disciplines that our sociology data raise.

Our interviews with feminist sociologists affirm this generational shift as authorship practices evolve, and they note the role gender often plays. One feminist sociologist is quite blunt in asserting that males, particularly those long-established in their fields, are less likely to work collaboratively, and when they do collaborate, it is hierarchical or "top down" so that senior faculty members receive first authorships, regardless of how the work has been distributed. In contrast, she says that when she coauthors with colleagues, they collaborate dialogically, and they either list themselves alphabetically or assign authorship according to participation in the writing. She concurs with Gottlieb (1995) that a macho ethos remains a powerful

influence, contributing to a kind of "polite ignoring" of the issues collaboration raises.

However, even our most outspoken critic of hierarchical practices comments that collaborating with students presents the thorniest challenge. In student-faculty negotiations, when novice-expert roles are most apparent, she finds it difficult to get students to see writing multiple drafts of their reports—to see being asked to revise—not as having "gotten it wrong" but as an expected part of the research and writing process. The effect of this is to establish her more as boss than collaborator or even mentor. Moreover, we note that it also enacts the idea that the "writing it up" activity is separate from the research activity, of the separation of epistemology and text production. Nonetheless, this feminist sociologist concurs with Kennedy (1995) when she observes that, "It is unquestionably easier to do cooperative research and writing in the 1990s than it was in the 1960s" (26), attributing the shift to the late twentieth-century challenges feminist and anticolonialist scholarship and interpretive anthropology posed to "the traditional 'objective' report authored by the heroic anthropologist, the scientist of culture who works alone" (26).

Significantly, the feminist ethnographers we spoke with also describe themselves as collaborating with their study subjects. Thus, researchers report that they typically invite their subjects to be active participants in shaping their research projects. For instance, study participants may be consulted regarding the researchers' interpretations of their observations or asked to advise researchers as to how they may most fairly be represented in the resulting text. However, this collaboration does not typically lead to sharing authorial credit, although younger researchers, particularly, comment on the complexity of this issue as they weigh the competing goods of informant anonymity, researcher objectivity, and activism. And, while this collaboration suggests our informants' significant concerns about issues of textual representation, it has not resulted in a different articulation of the writing and research process. The language of "writing it up"

still holds sway, although researchers may be highly conscious of the interpretive nature of both research and writing and of the role that positionality plays in that interpretation.

Finally, although none of our informants reports projects in which principal investigators or lead researchers had handed off the writing almost entirely to colleagues or students, they observe that this practice is not unknown in their fields, particularly in earlier years and in large projects directed by researchers pressed to sponsor heavy research loads.

These data on collaboration suggest that field-based values regarding the concept of ownership have significant implications for how professionals construct the relationships between research and authorship, data, and text. Scholars who work primarily with texts, for example, might be surprised to hear fieldworkers expressing a more urgent sense of ownership of their data or research sites than of the texts they produce. Indeed, this appears to be the case with most of the fieldworkers we interviewed, and thus it is worth noting that even in collaborative field research scenes, the lead investigators retain hierarchical control of protocols and practices. In contrast, the writing and publication processes are described almost as an afterthought, a pragmatic issue of "writing up" the data for dissemination, in which it is understood that one's authorial ranking is not necessarily indicative of one's contribution to the actual research or to the ensuing knowledge that the study produced.

FROM IP CONCEPTS TO TEACHING PRACTICES

Our investigation into faculty practices around the teaching of writing and plagiarism is revealing for what it both does and does not show. Perhaps most important is how thoughtful these fieldworkers are as they design writing projects for their students. Their comments point to serious investment in making connections with students and in helping them engage with their fields as well as to awareness of the critical role that assignment design can play in limiting the likelihood of plagiarism. However, the data we gathered also show that faculty do not

directly teach the writing or citation practices of their fields, nor do they discuss the connections between data, interpretation, ownership, and authoring.

Generally speaking, the writing that our informants ask their students to do falls roughly into two categories: writing to learn about the subject matter of the field, and writing to participate in the work of the field. In the former category, both archaeology and sociology fieldworkers describe asking students to write essays that connect their class readings to their own life experiences. By having students put their own perspectives in conversation with disciplinary ones, our informants hope to promote learning about their fields in felt (rather than abstract) ways that encourage deeper engagement with the materials. Also, in the writing to learn category, we found that both archaeologists and sociologists asked students to report on and respond to class readings and sometimes to museum or other exhibits they have visited. While these reports and responses are seen as a useful means of assuring compliance with reading and viewing assignments, our informants emphasize their interest in encouraging active engagement with the matters of each field. Although personal-connection assignments may not ask students to produce the professional written genres of these fields, they do ask students to find themselves "in the field," as, for instance, they examine their own experiences of race—or gender or class or age or other categories—in relation to the ways that sociologists study these elements.

The other group of assignments more closely parallels the writing that faculty members do within their disciplines, placing students, at least in constructed ways, "in the field." For archaeology students, this takes the form of writing up field observations and converting data sets into site reports. In some cases, these assignments draw on "dummy" data sets, and in others students work from actual fieldwork notes. For sociology students, this involves reading theory, observing, interviewing, and then explaining how their findings support, contradict, or expand the literature.

While our informants show a great deal of attention to creating meaningful writing assignments, they typically do not spend class time talking with students about writing or teaching them how to meet the genre expectations embedded in those assignments. In many ways, this mirrors their own experiences in learning to write as students and within their professions. All of our participants describe their writing lives similarly. They write (or supervise the writing of) field notes, interim site reports, and full-length studies for journal or book publication. They write grant and IRB applications; they review other scholars' books, journal articles, and exhibitions; and they write a miscellany of campus documents, such as faculty activity reports and letters of reference for students. Although these writing tasks are central to their professional lives, none experienced explicit instruction in writing for their fields as part of their own undergraduate or graduate curricula. In keeping with this tradition, then, our informants generally expressed a belief that students should have or would have learned to write elsewhere in their academic careers, most often pointing to general-education writing requirements and first-year composition courses.

Given this, it is not surprising that while our informants express concerns about student plagiarism, they typically do not include discussions of plagiarism in their own curricula. They do, however, report making deliberate attempts to reduce its likelihood. They also express mixed reactions to the increasing availability of Internet materials, noting that they can both enrich students' knowledge and invite them to plagiarize—in "innocent" ways. Students err in making uninformed moves between or connections among texts, in citing incorrectly, or in making baldly unethical moves as they download or even purchase writing that they turn in as their own. Although they decry these seamier practices, they generally resist the urge to police student writing, preferring instead to use assignment design to engage students personally and to limit possibilities to plagiarize—a move that offers a parallel between the ways students are "limited" by their "grounds" just as fieldworkers are limited

by their "grounds." Indeed, our informants note that because they are proactive in creating "plagiarism-limiting" assignments, they have relatively low incidences of plagiarism in their courses. They describe these assignments as having specific guidelines that control topics and source materials, thereby making it more difficult for students to find "ready-made" papers than to write their own. They also express the belief that students who are genuinely engaged in a topic are less likely to cheat. Thus, they explain, assignments that ask students to look at the ways their experiences intersect with the concerns of a discipline are less likely to be plagiarized both because students may be interested in doing the work for themselves and because it is more difficult to download a "personal response" assignment.

However, even though our participants emphasize preventing rather than policing measures, they do not take a next step of pointing to connections between the design of their assignments and the intellectual property, ownership, and citation traditions that have informed their professional practices; likewise, they do not describe specific discussions of these relationships in their classrooms. When we probed for such connections, our subjects first suggested that their own professional writing practices had "just become natural" to them; when pressed, they noted unanimously, with some surprise, that they had not thought about the connections between conceptions of intellectual property and the teaching of citation and other disciplinary and generic conventions. Again, we attribute this in large part to the ways in which our informants describe their own writing educations. Almost uniformly, faculty members report that they have come to understand the concept of intellectual property, the specifics of ownership of sites as well as of texts, and "the rules" about citation and plagiarism in three ways: (1) through immersion in its enactments in the field; (2) through trial and, occasionally, costly error; and (3) through the generosity of mentors who occasionally took the time to address writing practices more explicitly. Thus, while our informants express the desire to reduce the experience of learning by rejection that

they faced, they do not have many alternate pedagogical experiences on which to draw.

Therefore, what seems largely invisible is how our informants help their students see the connection between the fieldwork faculty members engage in, the professional writing they do themselves, and the work—including writing—that they ask their students to do. Even though some of their assignments come very close to duplicating the inter-activity of their own work, the connection between writing as fieldworkers and writing as students remains implied—and for students to discover on their own, if ever.

Remembering that fieldworkers uniformly identify their study sites as what they own before they mention the texts that report their findings in these study sites seems important. If always being the "first observers" and thus originators of the discoveries they report makes "writing it up" seem distant from "finding it," fieldworkers may be less likely to link their fieldwork practices to their writing and then to their students' writing and issues with plagiarism.

If, on the other hand, scholars see writing as inseparable from that which the text writes, they may focus more on the ways language constructs (as opposed to describes or reports) knowledge. Presenting a more recent view of the role of language in the making of knowledge, some scholars are now pointing in this direction. Hamalikis (2004), for instance, argues that an archaeological record is not simply an artifact of which scholars become stewards; rather, he says, "archaeologists are instrumental in *producing* that record out of the fragmented material traces of past social practices" (344). In contrast, faculty members who describe data collection and "writing it up" as two separate processes offer a more modernist understanding of rhetoric and language that suggests that knowledge is located in the data rather than constructed by interpretive acts that are embedded in language. This view then may offer less explicit language for discussing processes of writing and interpretation within this paradigm and

the role that the work of others plays in those epistemological activities; the assignment of meaning happens, obviously, but without conscious attention to how, when, and by what means it happens. This seems consistent with what most field researchers told us about their own experiences in learning how to write for their field: most learned by doing, rather than through explicit discussions of the relationship between doing and writing research and the thinking that undergirds the practices or conventions of their fields.

This (missing) link between discovering data and creating knowledge strikes us as a fruitful area for further consideration. Certainly, the second could not occur in the absence of the first, but how they are or are not linked is an important question both for discipline formation and for teaching. If, for example, writing is imagined as placing data into preset forms, it would seem to be a mechanical skill that is easily learned. This is the assumption our faculty informants seem to make when they express the expectation that their students will have learned to write elsewhere. But if one of the named scenes of ownership is authoring, and if authoring is understood as an integral part of knowledge making, then that activity must be more than mechanical data placement, which would complicate its teaching. Students would need to do more than internalize forms or simply "write it up." They would need to think about how data become knowledge and what writing has to do with these processes: they would need to think about the relationship between a study proposal and the ensuing looking that is done—as well as between the looking and the field notes that result—and ask how field notes then shape "writing it up." In other words, they would need to consider the role of narrative or expository choices in the interpretation of data and the production of knowledge. To be thoughtful about these intersections would involve attention to a kind of disciplinary literacy that includes concepts as well as rules about writing and citation.

FAR FROM TIDY CONNECTIONS AND CONCLUSIONS

Although this chapter focuses on fieldworkers' conceptions of intellectual property and ownership, the information we gathered offers us as researchers a unique opportunity to interrogate the assumptions we brought to this study. One of the concerns that these data raised for us almost immediately is the adequacy and appropriateness of our starting term "ownership." In many ways, the term has been useful, particularly as it elicited fieldworkers' consistent move to name sites and populations before texts when asked what they own. However, the term also proved problematic as our informants struggled against it, offering alternatives like "stewardship" and "studentship" to better express their professional ethics. These responses remind us of one of the very principles from which we started: that the language of a community is an enactment of its values and relationships. Given this, our own easy embrace of the term "ownership" is problematic because it runs contrary to certain other professional values that we hold, including our mutual belief that discourses are social phenomena that circulate in a shared culture.

These complications and contradictions, we think, serve as a useful reminder of the need to resist simplified notions of epistemology and disciplinary discourse that sometimes appear in Composition Studies generally and in WAC/WID work particularly. As Marilyn Cooper observed as early as 1989, disciplinary discourses are neither pure nor insulated from contact with other academic discourses, or from larger political, economic, and cultural zones. In our case, our inclination to think in terms of textual ownership reflects the enlightenment values that have long framed our humanistic understandings of authorship (as well as publishing practices), while our attraction to postmodern philosophies regarding language and meaning influence other aspects of our analyses and our teaching.

Indeed, in retrospect, our "buy in" to a primary language of ownership lies in a largely unspoken tendency to see citation in egocentric terms, that is, to see it in terms of identifying what we

ourselves own (property) rather than as an enactment of how we are thinking (participation). Not surprisingly, then, we see a similarly truncated view of textual ownership underwriting our students' understandings of and struggles with citation practices. For example, when students talk about plagiarism, they talk chiefly about how not to be caught calling something their own that actually belongs to someone else—an effort complicated by a simultaneous demand for originality or independent thought. Citing thus serves mostly as a way of staying out of trouble. However, when each of us has asked our students why they want the writers they read to cite, they respond quite differently: students say that they want to know who their sources are, why they should be believed, how their ideas developed—students want to know about authorial credibility and sequencing. When asked why they want to be cited when others use their work, they say that they want credit for that work but, equally important, that they want to be visible and active in the ongoing conversation. Advanced students, particularly, recognize that the way to be "seen" as participants/contributors and thus included in the continuing discussion is to be cited. These readerly-writerly reasons for citation are in marked contrast with the punishment-avoidance reasons, but they surface only when we situate students as participants in the creation of knowledge.

This process, however, is complex, as the data we collected from our informants also point to the mixed and evolving nature of disciplinary discourses. The influences of contemporary theory, for instance, have been changing the terms of ethnographic work, so much so that there are significant variations in how that work is conducted and announced, reflecting not only different methodologies but different ethics, obligations, and, to some degree, goals. Here, as with ownership, arise questions about the relationships between intellectual practices and pragmatic or political practices or habits. Whether, for example, the gendered division of labor sometimes seen in archaeology reflects the generally hierarchical, androcentric characteristics of the academy or more generally the "natural" assigning of

heavy outside labor to men and inside cleaner work to women—and whether this is "innocent" or "determined"—are questions archaeologists themselves debate. In the United States, this is of particular interest in that much archaeology is carried on outside of the academy, for example, by cultural resource managers who oversee the excavations for road widening or for anchoring tall buildings in areas that are discovered to contain artifacts.

The ways these archaeologists' practices have been constructed by and continue to construct their and others' disciplinary notions of ownership and collaboration are important elements in understanding how faculty members conceive of IP and ownership and how they teach students about plagiarism. For example, if in classes archaeologists want students to collaborate more as peers than as very differently situated contributors, they may find it useful to draw on their fields' collaborative practices to discuss multiple ways that students might collaborate. Indeed, looking at those practices may raise some interesting questions about the way in which the field tends to maintain hierarchical practices. While determining the significance of a pottery shard requires a different kind of preparation than carrying excavated dirt to a dump site does, both activities are essential. It is worth considering how describing this way of parceling out fieldwork could positively affect students' inclinations when asked to engage in collaborative class work. Perhaps drawing on contemporary disputes, such as those that Atwood (2005) and Shanks (1999) discuss, could help students become participants in the discussions that give rise to citation practices.

These data also demonstrate that forces external to the disciplines are shaping the direction of knowledge within various fields by choosing which studies will be funded and thus conducted. Such influences have been so forceful in recent years that they have raised concerns that the academic freedom of researchers is being abridged. Looking at our data, we can see that the pursuit of funding sources may be helping to retain certain hierarchical practices in fieldwork, even as emerging

ethical paradigms and other political concerns are challenging them. Here, Atwood's description of the ways "caustic professional spats" (6) can substantively alter and even curtail excavations and thus the knowledge that sites may offer as well as shape archaeology itself is instructive.

One of the questions that our data raise for us is how to tease out and understand the differences between pragmatic and political practices; for instance, are the funding preferences given to researchers who have proven track records rather than to novices or those working in riskier areas a matter of resource guarding or disciplinary censorship? A related question is whether such a distinction is useful or even possible. Certainly, all of the fieldworkers we interviewed acknowledge that the interactions of hierarchy, disciplinary practices, and gender have shaped their fields by favoring and supporting particular researchers, sites, methods, topics, and publications. Perhaps, then, we are better off to think of disciplines as conglomerations of multiple discourses, all pushing against and offering contexts for the others. It does seem, however, that we need to carefully think about these questions if we are to teach students to notice how the language circulating in a given field constructs, reflects, and continues to shape its terms of work and to use this knowledge to more confidently participate in its written conversations.

One such possibility could arise, for example, with archaeology students working in the field, where they often are responsible for writing the field notes that become incorporated in published research reports. Although writing notes in the field connects students and their faculty mentors and thus might allow faculty members to discuss the questions about ownership that IP issues raise, it also presents the hazard of students seeing "writing up" research as quite separate from doing research when they see their notes appear but do not appear as cited authors. That is, seeing faculty members include excerpts from student-written field notes in research reports that bear the faculty members' names only might lead students to conclude that "holding title to

writing" is separate from producing knowledge. Such arguments have even led students to extend this logic to the now-familiar arguments that papers students purchase over the Internet are indeed theirs because they "hold title" to them—and they have the VISA credit-card receipts to document that title.

On the other hand, particularly if faculty members can involve their students in the ongoing "writing up" of this field-work, the resulting connecting of language and epistemology by reconnecting writing and knowledge production might help archaeologists and sociologists engage students as participants in the work of their fields rather than as simply reporters of learning or producers of "correct" writing. This connection may also be made in classroom writing in which students turn field notes or data sets into research reports or draw on competing interpretive theories to explain new data. Here, too, even richer discussions of how writing and knowledge making intersect can occur as faculty members can become more reflective about how they "own," collaborate, and write and then translate those con-cepts to their students' sites of owning, collaborating, and writ-ing. For example, discussions might include considerations of how site or lab data become research reports, of what "writing it up" means, or of how each kind of writing—from field notes to final reports—involves writing that creates knowledge. As they draw on their fields' scholarly work to explore questions of who owns what and why and with what implications—questions about how data become knowledge—both they and their students will shape their fields' discussions of intellectual property concepts and their implications for specific questions about plagiarism.

In 1995, Gottleib called for more thoughtful consideration of how these texts emerge, noting that there is little clarity about who has done what in terms of research or writing. Even more important, she asserts, it usually remains mysterious whether they disagreed about procedures or findings or writing, how the authors' relationships to each other and to their scenes might have shaped what they saw and how they reported it, and how gender, ethnicity, language, or status might have foregrounded

or elided perspectives. Gottleib's challenge remains pertinent, and both our informants and our reading of their fields' discussions leave us with considerable enthusiasm about how the scholarship of fieldwork will continue to push questions of intellectual property.

The issues that these fieldworker/scholars raise are leading to what Nicholas and Hollowell described in 2004 as a paradigm shift in archaeologists' practices and policies, a shift that Benthall has argued can "alter the way law is conceived" (1999, 2). For example, Hirsch (2002), observes that given the "mismatch between market or capitalist economies . . . and societies where 'custodianship' or even 'reciprocity' are more prominent . . . ." our understandings of "copyright and patent are now in crisis and no longer hold the legitimacy they once did" (1). Thus, it seems reasonable to believe that just as Nicholas and Bannister (2004) assert, that "intellectual property rights will be a major factor in shifting current power structures and mind sets toward more equitable models between archaeologists and other stakeholders" (2004, 528), so, too, will fieldworkers work push our understandings of IP and ownership in other academic as well as professional arenas.

Looking then at the kinds of writing fieldworkers do and the writing they ask their students to produce raises important considerations for any faculty members whose courses involve writing and thus questions of intellectual property, ownership, and plagiarism. First, these connections open spaces for all of us to contemplate where disciplinary concepts of IP and ownership might inform faculty members' practices and, in turn, inform the writing students are asked to produce in those disciplines. And, second, it invites us to be more explicit in showing students how, even in "school writing," their writing parallels the writing of professionals and thus begins to situate them as professional scholars who can reflect, challenge, and shape emerging disciplinary practices. Thus reciprocal understanding of disciplinary histories, practices, and habits of mind may help all of us shift from policing plagiarism to educating emerging scholars.