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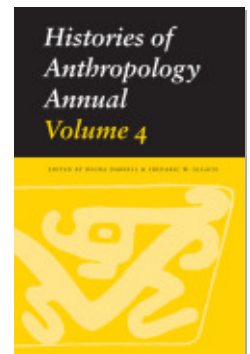
Networking Ohio Valley Archaeology in the 1880s: The Social
Dynamics of Peabody and Smithsonian Centralization

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Networking Ohio Valley Archaeology in the 1880s

The Social Dynamics of Peabody and Smithsonian Centralization

J. Conor Burns

Introduction

The mounds and earthworks of the American Midwest, and particularly those clustered throughout the Ohio River valley, were objects of preeminent importance to archaeologists and ethnologists of the nineteenth century.¹ A central theoretical problem for much of the period concerned situating the mysterious “moundbuilders” within overall schemes of the ancient peopling of the continent.² At the same time that these sites became increasingly salient objects of scientific inquiry, post-colonial development, particularly in the form of agriculture, steadily obliterated most of the above-ground mounds throughout the course of the century (Burns 2007). By the early 1880s, archaeological authorities from both the Peabody Museum of American Archaeology and Ethnology and the Smithsonian Bureau of Ethnology, at least partly out of concern for the rate of destruction, undertook concerted efforts to investigate the midwestern mounds in order to collect from them as much data as possible in the name of science.³ In both cases, these efforts might best be characterized as large-scale centralization initiatives.⁴ Institutional centralization required access to sites and specimens, and thus depended on the existence or creation of archaeological field networks that included a system of correspondent fieldworkers but were facilitated through other means as well.⁵ Centralization was also the process through which authorities explicitly sought to render institutional archaeology scientific by demarcating it clearly from the shoddy, speculative, or pseudo-scientific work of unqualified hobbyists and dilettantes.⁶

This paper will specifically address the Bureau of Ethnology and Peabody work carried out in southern Ohio during the decade of the 1880s. My principal aim is to extend existing histories of these important archaeological institutions by looking in detail at the dynamics of networking that facilitated centralization. The geographic limitations of

southern Ohio provide a tight focus for tracking interactions among a range of individuals who were involved in fieldwork.⁷ Underlying my account is the argument that successful centralization is a paradox in practice because it opens up new social spaces that are exploited in unexpected ways. Centralization provided a means of accumulating, controlling, and constraining archaeological materials and practices, thereby rendering institutional centers as places of scientific archaeology. And yet it could only succeed by the complete openness of its networks, particularly so in a context framed by intense inter-institutional competition. In promoting centralization, institutional authorities, even with the best of intentions, encouraged and subsumed practices that contravened the stated aims and ideals of the process.

Centralization as Science

At the beginning of the 1880s, the mounds of the Ohio Valley remained a serious problem for archaeologists. After several decades of study archaeologists and ethnologists did not agree on such key issues as who the moundbuilders were, where they had come from and where they had gone, and especially what sort of lineal relationship (if any) existed between the moundbuilders and extant Native Americans. Scholarly disagreements over theory aside, a much more pressing concern was the fact that the sites were being rapidly obliterated by development. Figures such as Frederic Ward Putnam, director of the Peabody Museum, and Cyrus Thomas, head of the Bureau of Ethnology's Mound Exploring Division, believed that a critical moment had arrived in terms of the archaeological study of the Ohio Valley. Ohio had become one of the most populous and economically productive states in the nation, and construction associated with the states' many growing cities and towns as well as the building of transportation routes had taken a heavy toll on many mounds and earthworks.

Agricultural practices, however, exacted the most extensive and continuous damage. Even as early as 1820, scholars expressed concern about the harmful effects of plowing on the mounds, particularly in southern Ohio where mound and earthwork complexes could be found almost everywhere there was arable land (e.g., Atwater 1820:121; Anonymous 1838:361; Squier and Davis 1848:xxxix). By 1880, the impact of farming on Ohio's ancient monuments had reached crisis proportions: with nearly a quarter million working farms, the cumulative effects of cycles of plowing and erosion on the mounds threatened to erase the state's archaeological past.⁸ What once must have seemed to early colonial settlers in some regions of the state a nearly ubiquitous feature of the land-

scape had become scarce.⁹ Throughout the 1880s, archaeological workers in southern Ohio for both the Peabody and the Bureau of Ethnology regularly reported on the difficulty of finding sites that had not been significantly damaged by plowing. Even many of the sites made famous in Ephraim Squier and Edwin Davis's 1848 Smithsonian-sponsored monograph *Ancient Monuments of the Mississippi Valley* had been destroyed by plowing (Putnam 1973d; F. W. Putnam to Esther Orne Clarke Putnam, May 30, 1887, Putnam Papers, Box 7, Folder "P").¹⁰ Despite years of awareness of the problem, the momentum of American development proved unstoppable, and so it was that the leading figureheads of institutional archaeology turned their attention to the mounds while there might still be time.

The Peabody Museum of American Archaeology and Ethnology in Cambridge, Massachusetts, was established in 1866 and quickly became a leading center for the promotion of archaeological research (Hinsley 1992). By the time Frederic Ward Putnam became its director in 1875, he had been named permanent secretary of the American Association for the Advancement of Science where he had been largely responsible for redesigning an "Anthropology" subsection within Natural History (Mark 1980:15–21). Putnam, a former student of renowned Harvard zoologist Louis Agassiz, was a central figure in eastern scientific circles and had done much to situate himself at the hub of a network of natural history practitioners (Winsor 1991:34–37; Kislting 1994). At the Peabody he oversaw completion of a significant architectural expansion of the museum in 1877, and he continued to build and nurture a system of field correspondents established by the museum's first director Jeffries Wyman (Putnam 1973e:161–162; Hinsley 1992:124). Throughout the 1870s, Putnam became increasingly intrigued by the Ohio Valley mounds. By the time the AAAS met in Cincinnati in 1881, Putnam was convinced of the centrality of Ohio Valley archaeology for understanding North American prehistory, and he had begun collaborating with a number of avocational archaeologists on work in the Little Miami River valley (Barnhart 1998:148; Hinsley 1992:130). From there, Putnam moved outward into other regions of southern Ohio and established a strong Peabody presence.

The Bureau of Ethnology was formed in 1879, giving existing Smithsonian anthropological initiatives much needed direction and focus (Hinsley 1994:145–189). Its appearance roughly coincided with the completion of the Smithsonian's National Museum in 1880, both in some measure the result of financial momentum gained in the wake of institution's involvement in the 1876 Philadelphia Centennial Exposition.¹¹

John Wesley Powell, Civil War and Interior Department western survey veteran as well as former special commissioner for the Bureau of Indian Affairs, was a logical choice for the position of director of the new Bureau.¹² Initially he focused on ethnographic and linguistic mapping projects of western Indian tribes, but pressure mounted for further archaeological investigations of the mounds. By early 1882 Cyrus Thomas was put in charge of the Bureau's Mound Exploring Division (Powell 1894:xxxix–xlvi). Prior to this he had been active in midwestern natural history circles. He founded the Illinois Natural History Society and served as entomologist for the Hayden surveys, then as State Entomologist of Illinois (Anonymous 1910). Thomas did not possess extensive archaeological field experience, but his background certainly gave him the skills to oversee the sort of coordinated archaeological survey of the mounds that he and Powell envisioned. Smithsonian field science had long relied upon networks of correspondent workers, and Thomas was well situated to continue that tradition in the service of the Mound Exploring Division.¹³

The Bureau of Ethnology and Peabody approaches to the mounds embodied strikingly distinct intellectual frameworks while simultaneously having much in common in terms of overarching practical goals. Some understanding of these differing theoretical commitments is necessary in order to decipher the actions of certain individuals within the centralizing networks. Putnam thought of prehistoric North America as a place where complex patterns of human migrations throughout the continent occurred over an exceptionally long period of time, going back at least eight to ten thousand years (Putnam 1973a:166). He thought that direct associations between moundbuilders and particular extant Native American tribes could not be made with any certainty given the plurality of human groups moving around over the course of this long span of time (Putnam 1973c:216). In his director's report for 1889, Putnam reflected upon what he saw as a longstanding tendency for ethnologists to privilege unity over diversity when interpreting the ethnological record:

To this heterogeneous people the name Indian was given, in misconception, nearly four hundred years ago, and now stands as a stumbling block in the way of anthropological research; for under the name resemblances are looked for and found, while differences of as great importance in the investigation are counted as mere variations from the type. (Putnam 1973e:169)

This deeply entrenched intellectual bias, Putnam thought, had likewise informed conceptualizations of North American prehistory.¹⁴

The intellectual framework for the Bureau mound survey, articulated repeatedly by Thomas throughout the 1880s, represented a stark contrast. Powell and Thomas believed that the proliferation of misleading romantic theories about moundbuilders had been due precisely to a failure to unite moundbuilders and more recent natives. The time had come, they thought, to establish conclusively that moundbuilders and Indians were one and the same people.¹⁵ For Thomas and others at the Bureau, the conviction that mounds were built by Indians became the presupposed starting point for the Mound Exploring Division's work (Thomas 1884:90; Powell 1894:xl–xli). Early in the mound survey, Thomas professed that “*every* fact which indicates similarity between the Moundbuilders and Indians in arts, customs, religion, modes of life, etc.,” is “an argument in support of this theory” (Thomas 1884:90, emphasis added). There are significant further nuances to both the Peabody and Bureau positions—such as that Bureau archaeologists discounted evidence for the extreme antiquity of humans in North America—but enough has been said for present purposes.¹⁶

Another general distinction, one related to field strategies rather than intellectual design, characterized the Peabody and Bureau archaeological work of the 1880s. Putnam was inclined to undertake intensive, long-term investigations and became known for spending several field seasons thoroughly exploring and excavating particular sites (Peet 1884c). Thomas, on the other hand, directed the Mound Exploring Division according to the western survey model with which both he and Powell were familiar. For Thomas, the mound survey was essentially a sort of mapping project to correlate mound regions to known Indian tribes. It was more useful to gather a geographically broad range of data even if that meant sacrificing a detailed examination of each and every mound (Powell 1894:xlvi–xlvii).

Despite substantive differences in overall investigative style, these projects had in common the fact that they were centralizing endeavors. In order to counter the accelerating dispersal and loss of archaeological information and material from Ohio, it had to be accumulated at the institutional centers. In this regard, both undertakings must be viewed within the broader contexts of late nineteenth century museum building and the associated emergence of a fiercely competitive international market for antiquities and ethnographic objects (Conn 1998; Penny 2002, especially pp. 51–94). Without question the desire to accumulate objects and build “complete” archaeological collections was integral to Peabody and Smithsonian archaeological projects of the period, and the Ohio Valley work was no exception. But it is also important to note that

this was seen as the only way of saving the archaeological record of the region from certain loss.

Hand in hand with the desire to accumulate went the rhetorical promotion of institutional archaeology as science. Putnam and Thomas explicitly sought to demarcate their work from what they identified as the haphazard, unsystematic efforts that typically occurred. Putnam, for instance, insisted that the principal Peabody collections had been made by

trained explorers in the field, who have done their work in a thorough manner and have brought together masses of material of inestimable value for study, as each object is authenticated and the exact conditions under which it was obtained and its association with other objects fully recorded. (Putnam 1973e:164)

Peabody workers collected specimens as well as very carefully made “field notes, drawings, plans and photographs.” Thomas, in a circular distributed to the newly reorganized Ohio State Archaeological and Historical Society, and then subsequently to many of the state’s newspapers, expressed similar sentiments in announcing the Bureau’s mound survey:

The pre-historic remains of Ohio are becoming rapidly obliterated by the plow, and soon an accurate description of them will be impossible. Explorations are often made of sepulchral mounds and other works by persons only partially qualified, and objects of interest found in them are kept for a time as curiosities and finally lost. These relics are of little scientific value except when gathered into large collections, and when the precise manner and place of their deposit are accurately preserved. (*Cincinnati Commercial Gazette*, n.d. [July 1, 1884], Division of Mounds Exploration Records, Box 6, Folder “M. C. Read 1884”)¹⁷

Here, Thomas linked the “scientific value” of specimens directly to the centralizing practices of qualified Bureau fieldworkers. Both Putnam and Thomas reiterated these themes throughout the decade.

If centralization provided the means by which Peabody and Smithsonian field archaeology was in principle rendered scientific, then the processes of networking by which it occurred demand close scrutiny, especially since these were two centers in competition with each other. Peabody and Bureau fieldworkers often sought access to sites and specimens in overlapping regions.¹⁸ Despite a façade of gentlemanly cooperation at the public and institutional level, the sometimes fierce competi-

tion was a determinative factor in the course of the southern Ohio work. How, then, did Peabody and Bureau authorities engage the field, and what was the effect of that engagement? Who were the “trained” and “qualified” fieldworkers upon whom the mantle of accuracy, thoroughness, reliability, authenticity and trustworthiness had been placed, and how did they act?

Correspondents in the Field

The use of correspondent fieldworkers, as noted above, had been a regular feature of Peabody and Smithsonian activities for some time prior to 1880, and it remained integral to the Ohio Valley work in the decade to follow. In fact, workers at the correspondent level represented the most active and dynamic part of the centralization process. In the heightened atmosphere of institutional interest in the mounds during the 1880s, greater opportunities for correspondents arose as a consequence. These included the possibility of paid fieldwork, the chance to establish credibility as an archaeologist, and the (much slimmer) chance to forge some sort of long-term career in archaeology. This set of developments alone, I would argue, represented a decisive shift from earlier scenarios in terms of complicating the power relationships between center and periphery: now we find institutional authorities offering greater rewards for quality work and results, and along with that we find workers with greater power to leverage the value of their work against shifting norms. We also find the emergence of competition at yet another level—between individuals looking to gain access to and participate within the correspondent community of Peabody or Bureau of Ethnology fieldwork.¹⁹

In general, the correspondent community comprised individuals with whom Putnam and Thomas built working relationships, people who could be trusted to do good work in the field and who brought something valuable to the cause of centralization. Indeed, trust lay at the heart of correspondent-institution relationships—it did not come automatically and it had to be earned and maintained. Correspondents normally possessed some level of proven experience with archaeological fieldwork, and many had established a degree of credibility and trustworthiness from having published something in either local scholarly society periodicals or within venues such as the Smithsonian *Annual Reports*. Other sorts of field experience equally counted as useful, such as with geological or topographic surveying. In the context of centralization, however, probably the most valuable experience a correspondent could possess was of a social and not technical nature: the more landowners or collectors one knew, the better for gaining access to sites and specimens.

For the most part, correspondents had other careers or means of supporting themselves. Populating the correspondent community were doctors, geologists, topographic engineers, teachers, lawyers and judges, clergymen, and retired military officers. Fieldwork was typically conducted in a piecemeal fashion mainly during warmer months, and correspondents generally did receive some sort of financial compensation for their efforts. At the least, Putnam and Thomas tried to ensure that their fieldworkers had their expenses reimbursed. In Putnam's case, money for fieldwork came largely through a subscription campaign organized around public lectures that he regularly gave throughout New England (Putnam 1973a:185; Putnam 1973b:202; Putnam 1973c:212; Anonymous 1888a).²⁰ The Bureau's mound survey received an annual operating budget from Congress in order to temporarily employ a small group of fieldworkers as "agents" of the Bureau (Powell 1894:xl-xli).

Either way, the basic mechanics involved in the relationship between correspondent and institution were similar. Fieldworkers maneuvered about through mound territory, visiting sites and making contacts, and enlisting additional field laborers if necessary. Regular communications flowed between correspondent and institution through the mail. If deemed necessary, correspondents received advice or instructions on where to go or how to do fieldwork. Periodically institutional authorities went into the field to participate or to check on progress (very periodically in Thomas's case—Putnam spent far more time in the field directly participating in fieldwork). Correspondents submitted letter reports based on their work over a given period of time, and shipped crates of specimens by rail back to the respective museums. The letter reports were often subsequently incorporated into more synthetic Peabody or Smithsonian publications. Occasionally, and if funds permitted, a corresponding archaeologist would be brought in to help with museum work or to do some further writing.

Generalizations about the correspondent community are useful for understanding its overall complexion, but it must be emphasized that this community was made up of individuals acting under their own motives. Thus, despite certain general appearances, it is best viewed as a heterogeneous collective within which unpredictable and idiosyncratic actions frequently occurred, and which were often driven by individual desire to participate somehow in Peabody or Smithsonian archaeology.

Without question one of the most successful correspondents for either institution was Charles Metz, who worked closely with Putnam for a decade beginning in the early 1880s.²¹ Metz in every respect was a model correspondent fieldworker. He was a Cincinnati area doctor and avo-

cational archaeologist who had been involved in explorations of sites throughout the nearby Little Miami River valley for some time prior to Putnam's emerging interest in the region. Metz had published at least one substantial account of his work in the *Journal of the Cincinnati Society of Natural History*, and he was a central figure in the archaeologically active Madisonville Literary and Historical Society (Metz 1879; Low 1880; Langdon 1881. Also, see Barnhart 1998:147–148). He quickly became Putnam's chief fieldworker in Ohio, and was responsible for an enviable register of work on some of Ohio's most famous archaeological sites, including the Madisonville Cemetery, the Turner Mound Group, and Serpent Mound.

Metz's field qualifications were superb and he could afford to spend extended periods on site explorations, but his social associations may have done most to further Peabody work in Ohio. Metz worked regularly with a number of other active avocational archaeologists, and some of his Madisonville associates, such as Charles Low, regularly accompanied him on Peabody work throughout the decade. More importantly, Metz was also well connected to many landowning farmers in the Little Miami Valley. As a result, Putnam could report on having acquired for the Peabody "exclusive right of exploration" of sites on farmers' properties (Putnam 1973c:212). Considering that some sites—such as the fifteen-acre Madisonville Cemetery at which Putnam and Metz worked periodically throughout the decade—were quite extensive, archaeological work could be disruptive to farming routines (Putnam 1973a:185–190). Forging and maintaining secure working relations—especially with farmers—was critical within the context of centralization, and required skill and tact, as when Metz sent a letter of condolence to Michael Turner on the death of the farmer's son. To Putnam Metz then wrote in regard to the matter, "You know it is best to keep on the good side of the old gentlemen for next summer's work" (Metz to Putnam, November 25, 1888, Peabody Accession File 88–55, Folder "Expedition to Ohio-Serpent Mound") Metz and Putnam had already completed excavations on some of the Turner Group mounds, and they hoped to continue. Much yet remained to be explored.²²

Metz was Putnam's eyes and ears in southern Ohio when Putnam could not be in the field. He was able to monitor weather conditions for expediting site survey work, and he handled preparatory tasks in setting up field camps prior to Putnam's arrival (Metz to Putnam March 15, 1888, March 16, 1888, Peabody Accession File 88–55, Folder "Expedition to Ohio-Serpent Mound").²³ The two men were genuine friends who worked well as a team. They periodically lived together in

field camp settings for weeks on end, often with other members of their respective families along. Over the course of the decade it would be fair to say that Metz's name became virtually coextensive with Peabody archaeology in southern Ohio. Putnam repeatedly credited him in Peabody publications based on that work, and as a result Metz's reputation as an archaeologist benefited greatly. Had Metz wanted to make a career of archaeology in some capacity, he would have had as good a chance as anybody in the 1880s. Metz was deeply committed to quality archaeological practice, but it remained for him a hobby activity. By early in the next decade his name receded from the archaeological scene, as far as I have been able to tell.

Contrast Metz's example with that of Charles Smith, who stands somewhat at the other end of the correspondent spectrum. Through a combination of serendipity, struggle, hard work, and guile, Smith carved out a lasting but frequently uneasy working relationship with the Bureau of Ethnology. He grew up in western Ohio and had been eking out a poor living as a part-time schoolteacher and special student at The Ohio State University in Columbus in the early 1880s.²⁴ Smith had developed an intense interest in archaeology and was spending much of his spare time traversing a twenty-square-mile area of the Licking County uplands east of Columbus, better known as Flint Ridge. However, he had not published anything of note nor does he seem to have maintained any visible presence in local archaeological or historical societies. Smith learned of Thomas's mound survey, and in early 1884 he began pleading with the Bureau for work, but, unlike Metz, he was a completely unknown quantity. His timing could not have been better, however, and he knew precisely what Bureau authorities were looking for in a field correspondent.

Just a few months earlier, in September 1883, Putnam and Metz had begun looking beyond the Little Miami Valley and were taking interest in sites further east in Ohio, some of which were famously described by Squier and Davis.²⁵ Thomas and Smithsonian secretary Spencer Baird were troubled about what they perceived as Putnam's growing control over southern Ohio archaeology.²⁶ "Dear Professor," Baird responded to Thomas's concerns on the matter in early August 1884, "I suspect you are quite correct in your impressions in regard to Putnam. We cannot admit for a moment his right to monopolize any field of archaeological research" (Baird to Thomas, August 4, 1884, Division of Mounds Exploration Records, Box 8, Folder "Referred by S. F. Baird to C. Thomas") What the Bureau needed was someone such as Charles Metz who could help establish a strong presence in Ohio.

Into this scenario stepped Smith, whose prospects for Bureau work

brightened considerably by autumn of 1884. A recommendation from Robert McFarland (an Ohio State professor of mathematics and civil engineering) certainly helped his cause, but not nearly as much as his continual assurances to Thomas, Powell, and Baird that he could get more work done for the money than anyone else because he knew the terrain and he was friends with many farmers and others who could assist him.²⁷ Smith wanted to do a thorough study of Flint Ridge, so named for its unique outcrops of very fine, multi-hued, and eminently workable quartzes, high-quality material which had been heavily quarried in prehistoric times and distributed widely by ancient peoples. He got his chance.

The project resulted in quite a respectable paper for the *Smithsonian Annual Reports* (Smith 1884). Smith had been doing his research—the paper combined a relatively sophisticated geological understanding of the formation and distribution of silicate minerals with a lucid narrative interpretation of Flint Ridge’s use by ancient Native Americans. Smith and his helpers examined a few of the numerous ancient quarry pits that dotted the ridge. One of Smith’s best insights was his identification of different kinds of “workshop” areas that had been used by ancient peoples to transform the quarried stone from large blocks to more finished and transportable forms. In his analysis, the intermediate stages of unfinished forms revealed distinctive manufacturing processes. It was a skillful piece of work, and Smith thereafter joined the ranks of the paid Bureau field agents, earning a typical salary of approximately one hundred dollars per month.

Smith proved useful to the cause of Bureau centralization, particularly when it came to acquiring artifacts, by maintaining a keen awareness of available materials in local private collections. Here he made good on his promised networking associations, reporting to Thomas that most farmers in his area of the state possessed sizable collections of specimens and were generally looking to sell items. Smith—who avidly maintained his own personal collection of stone implements—routinely purchased from farmers if he thought prices were reasonable. To Thomas, he offered to pass on specimens “at what they cost” (rather than at an implied profit he could make elsewhere) (Smith to Thomas, January 28, 1885; and Smith to Thomas, November 6, 1884, Division of Mounds Exploration Records, Box 5, Folder “Charles M. Smith Correspondence, 1884–1887”). For the most part, Smith seems to have kept the choicest items for his own collection, selling duplicates on to the Bureau and Smithsonian.

Despite the promising start at a smooth transition into steady archaeo-

logical work, Smith's search for a professional identity under Thomas over the next several years was marked by restlessness and frustration. At one point, for example, we find Smith fully endorsing the Bureau's intellectual strictures when reporting to Thomas that the members of a Maysville, Kentucky, historical society had nothing to say but "incoherent sentences" about mysterious moundbuilders and human antiquity (Smith to Thomas, July 10, 1885, Division of Mounds Exploration Records, Box 5, Folder "Charles M. Smith Correspondence, 1884-1887"). Yet, Thomas later found it necessary to caution Smith not to fall prey himself to the seductive and contentious theory of exceptionally ancient New World Paleolithic tool makers (Thomas to Fowke, October 31, 1887, Division of Mounds Exploration Records, Box 10, Folder "Gerard Fowke ['Charles M. Smith']"). Smith also once informed Thomas of the activities of the emergent Columbus-based Ohio State Archaeological and Historical Society, adding, "but I doubt very much whether anything can be learned from them, as my acquaintance with most of its members convinces me that they know more of almost anything else than of archaeology" (Smith to Thomas, July 10, 1885, Division of Mounds Exploration Records, Box 5, Folder "Charles M. Smith Correspondence, 1884-1887").²⁸ Thomas, Powell, Baird, and even Putnam were all corresponding members of this actually rather important state-level organization, a fact Smith seems not to have known as he earnestly sought to distinguish himself from the regional archaeological interests it represented. By the end of the decade Smith became a member of the OSAHS, and had published two substantial articles in their journal.²⁹ One of these took a remarkably antagonistic tone in attacking those who refused to accept the Bureau's blanket "moundbuilders are Indians" position.

During his time with the Bureau, Smith was incessantly worried about the prospects of further work. Many of his letters end with desperate queries along these lines, so it is apparent that his employment status with the Bureau was by no means secure. Smith was, as he told Thomas, willing to go anywhere, even if he thought he would be unable to do efficient work in strange places. And so he found himself being directed briskly through various states bordering the Ohio River, as well as at least Michigan. He was also willing to undertake excavations in the cold of winter. And yet he often expressed intense frustration at the mundane tedium of correspondent field life (such as dealing with railroad and shipping officials), and suffered episodes of severe writer's block (especially after confronting an unfamiliar piece of new technology called the typewriter).³⁰ Smith was happiest when the work directly involved the stone

implements that he loved; anything else, such as collecting information about recent Indian tribal history or dealing with railroad freight offices, simply had to be suffered. He even worried about his abilities at making field sketches, admitting to Thomas that drawing was not one of his greatest skills (Smith to Thomas, January 28, 1885, Division of Mounds Exploration Records, Box 5, Folder "Charles M. Smith Correspondence, 1884-1887").

Perhaps the most telling part of Smith's story has to do with his own name, because even that, it seems, became tedious to him in his quest for professional identity. In mid-1885, he adopted the moniker "Kentucky Q." Smith (sometimes just "Ky. Q.") in his letters to Thomas (Smith to Thomas, May 9, 1885, Division of Mounds Exploration Records, Box 5, Folder "Charles M. Smith Correspondence, 1884-1887"). Eventually in 1887, however, he changed his name altogether to Gerard Fowke.³¹ Fowke continued working for Thomas in the field in varying capacities until the end of the decade, and spent some time in Washington working up a study on stone tools in the National Museum collections that was to be included as part of a planned final report of the Mound Exploring Division. As of May 1891 he was reported to have "rejoined" the Bureau as an assistant archaeologist, but this was to be short-lived (Powell 1894:xxvii).

Fowke's relationship with Thomas and the Bureau always retained the same degree of restless unease that typified the earlier period of his work.³² In the end, his character and temperament—and perhaps even certain of his archaeological skills—proved too unpredictable to have earned him a permanent place among Bureau of Ethnology archaeologists. When Fowke did eventually publish a book on Ohio archaeology it received mixed reviews ranging from lukewarm praise to outright condemnation. Some reviewers saw it as dangerously opinionated and virtually without merit (Fowke 1902).³³ One commented on the fact that Fowke unfairly attacked Thomas and his fieldworkers for lacking practical archaeological experience and felt it necessary to point out to readers not to forget that Fowke himself "was employed in fieldwork by the Bureau and was dropped" (McLean 1902:260-261).

While the examples of Metz and Fowke alone clearly indicate the contrastive range of individuals' participation in the networking process, other Ohio correspondents deserve some mention. Henry Lee Reynolds, for example, worked for the Bureau of Ethnology in the late 1880s and, with Fowke, assisted an agent named James Middleton in resurveying a number of large geometric earthworks in Ohio first documented by Squier and Davis (Thomas 1889:27-32).³⁴ The purpose of the re-

survey was to correct the misperception that moundbuilders possessed some “advanced” knowledge of geometry, a supposition reinforced by Squier and Davis’s depictions of certain works as perfectly regular circles or polygons. One of Reynolds’s tasks, apparently, was to make a determination on the theory that some earthworks were products of an early French influence, a suggestion Thomas took into consideration and dismissed (Thomas 1889:32–33; Reynolds to Thomas, October 25, 1888, Division of Mounds Exploration Records, Box 10, Folder “H. L. Reynolds (Ohio) 1888, 1889.”).³⁵ As Reynolds put it in a letter to Thomas, “it is possible and even probable that the Indian, who in some cases has and had as keen an idea, intellectually, of symmetry as we white folk, laid out these works by a mere system of sighting” (Reynolds to Thomas, October 25, 1888, Division of Mounds Exploration Records, Box 10, Folder “H. L. Reynolds (Ohio) 1888, 1889”). Ironically, the previous year, Reynolds met with confusion when attempting to navigate the state’s fractured system of land survey subdivisions in order to locate sites on county maps (Reynolds to Thomas, July 22, 1887, Division of Mounds Exploration Records, Box 10, Folder “H. L. Reynolds (Ohio, Minn., Wisc.) 1886, 1887”).

Reynolds also experienced firsthand the results of competition between the Smithsonian and the Peabody. At one point, Reynolds was sent to Cambridge to visit the Peabody Museum, meet with Putnam, and have a look at the museum’s Ohio collections, presumably because this would help get a better idea of what to expect when working in the state. Reynolds found Putnam cautiously guarding his Ohio materials—they were locked away and not on exhibit, and, although Putnam spent two full days showing them to Reynolds, he would not let the Bureau agent make sketches nor take notes on many of them. In confidence to Thomas, Reynolds surmised that Putnam did not want his data being used to support the Bureau’s theory about the moundbuilders.³⁶ Back in the field in Ohio, Reynolds was further frustrated in efforts to access sites when learning that one of the Harness farm mounds had been “reserved” by Putnam over two years earlier and that Putnam had not been back to do any work there since (Reynolds to Thomas, July 28, 1887, Division of Mounds Exploration Records, Box 10, Folder “H. L. Reynolds [Ohio, Minn., Wisc.] 1886, 1887”). The overall frustration Bureau agents felt getting access to sites must have been palpable. A year later, in the summer of 1888, Middleton expressed concern to Thomas that landowners of mounds listed by Squier and Davis were generally inclined to deny access specifically to Smithsonian representatives (Middleton to Thomas, July 1, 1888, Division of Mounds Exploration Records, Box 10, Folder

“J. D. Middleton, Ross and Licking Counties, 1888–9”). Putnam’s activities had at least something to do with this situation.

Hilborne Cresson worked as a Peabody correspondent in 1890–91 in the rush leading up to the 1893 Chicago World’s Columbian Exposition for which Putnam was overseeing the anthropological exhibits.³⁷ Cresson was a Philadelphia medical student who desperately wanted to drop his medical duties to get a foothold in archaeology and work “heart and soul” for Putnam (Cresson to Putnam, January 2, 1890, Putnam Papers, Box 6, Folder C).³⁸ And work he did. In two short years Cresson logged many miles traversing the continental United States, from the east coast to Ohio to Colorado and back to Ohio. In Philadelphia Cresson directly experienced animosity toward the Peabody from the anthropological circle that included Daniel Brinton. These men, he wrote to Putnam, were nothing but rich merchants and lawyers who did no fieldwork and acquired their specimens from auctions. “They are the secret enemies of our museum,” Cresson continued, “and have tried in every case to throw dirt at and on our researches [into the American paleolithic]” (Cresson to Putnam, January 2, 1890, Putnam Papers, Box 6, Folder C). In the summer of 1890 Cresson worked with Metz at the Turner site in Ohio. The following year was a busy one—he began field investigations in Ohio, then spent four rugged months doing reconnaissance work on Pueblo sites in southwestern Colorado, only to return by late August to the more hospitable environment of Ohio to continue investigations at Fort Ancient and the Foster’s group of mounds. He had been shocked by the greedy, unethical, and destructive archaeological practices he witnessed out west, and admitted frankly that a “relic boom” had been fueled largely as a result of Putnam’s preparations for the upcoming World’s Columbian Exposition (Cresson to Putnam, August 24, 1891, Putnam Papers, Box 9, Folder C).

Warren Moorehead provides a further example of the extent to which institutional centralization created a unique environment to be exploited by ambitious avocational archaeologists. Adventurous in spirit, Moorehead came from a well-off family and was drawn to the romance of mound digging and specimen collecting from a relatively young age and with a genuinely entrepreneurial zeal (Weatherford 1956; Anonymous [“R. J. M.”] 1939).³⁹ Not yet twenty years old in 1885, the financially independent young man had been halfheartedly attending Denison University in central Ohio while devoting much of his time to archaeological fieldwork throughout the area. Moorehead was regularly working with a number of field assistants and had amassed a large personal cabinet of archaeological objects by the time he first contacted Spencer Baird and

offered his services as regional specimen purchaser for the Smithsonian (Moorehead to Baird, March 3, 1885, Division of Mounds Exploration Records, Folder “Warren K. Moorehead, Licking Co. 1885–6”). Cyrus Thomas later declined to offer him a paid position as Bureau agent, perhaps in part because Thomas had only recently hired Charles Smith from the same area of the state. Nonetheless, Moorehead remained undaunted, simply stating that he would continue working at his own expense, and would be able to dedicate increasingly more time to archaeology (Moorehead to Thomas, June 7 and November 13, 1886, Division of Mounds Exploration Records, Folder “Warren K. Moorehead, Licking Co. 1885–6”).

Over the next few years, Moorehead did just that in a remarkable effort to build a reputation as an archaeological field expert. Between 1886 and 1889 he undertook investigations of a number of sites including Fort Ancient, the sprawling hilltop earthwork in southwestern Ohio that was one of the largest and most famous in the state.⁴⁰ Both Putnam and Thomas had had limited success in gaining access to this highly desirable site.⁴¹ Moorehead, on the other hand, was able to spend prodigious amounts of time excavating there over a period of four years with his team of field hands. During the same span of time, Moorehead strategically promoted himself to great personal advantage by publishing numerous accounts of his fieldwork in which he heavily advertised his own precise, systematic field methods (Moorehead 1886; 1887; 1889; 1890a; 1890b; 1890c). When Moorehead wrote to Putnam in August 1889 looking for work with the Peabody, he emphasized that he had spent thirteen weeks that year alone at Fort Ancient carefully directing a team of excavators according to rigorous methods. Not so casually, he mentioned that he was sending a large collection of artifacts to Washington for temporary loan, and that he had spent nearly four thousand dollars of his own money to finance the fieldwork. “So you see I mean ‘business,’” he concluded with an obvious desire to be recognized as a serious and dedicated archaeologist (Moorehead to Putnam, August 26, 1889, Putnam Papers, Box 7, Folder M). The gambit eventually paid off and Moorehead found himself employed by Putnam for a time in 1891–92 to excavate an important mound group on the Hopewell farm in south central Ohio as part of the Peabody’s World’s Columbian Exposition preparations (Moorehead 1892:184–196). Interestingly enough, not long before this Moorehead had visited the Smithsonian National Museum on business there, and apparently was still hopeful for a Bureau of Ethnology position. To a colleague, Thomas then expressed his opinion that Moorehead was unqualified for

Bureau work (Thomas to Henry Henshaw, April 20, 1890, Division of Mounds Exploration Records, Box 9, Folder "1894-1896"). And yet the man became one of the most active and recognized names in Ohio archaeology in the late 1880s and 1890s. His 1892 book *Primitive Man in Ohio* was a well-received compendium of the Ohio fieldwork he had completed over the previous several years. It included an account of the Hopewell work he had supervised for Putnam, as well as an extensive list of acknowledgments for assistance from individuals such as Fowke and Cresson (Moorehead 1892:vii-viii). Whatever else one might say about Moorehead, he was enterprising, and within the context of Peabody and Bureau centralization, he found a way to advance himself on his own terms while contributing to the process. In the mid-1890s he became curator for the Ohio State Archaeological and Historical Society, where he was said to have greatly increased its collections. Moorehead then went on to a long career as archaeological curator for the Phillips Academy in Andover, Massachusetts (Weatherford 1956:180).

Resistance and Accommodation

The participation of correspondents in institutional centralization challenges us to think about how institutional authorities engaged the field. Considering, for example, that Thomas wished to portray his corps of archaeological field agents as a unified front rigidly promoting the Bureau views, the reality of the situation was considerably more heterogeneous. And as the case of Moorehead indicates, Putnam and Thomas disagreed on who counted as a qualified fieldworker. All the examples considered above are of people who willingly contributed to institutional initiatives, even if their individual motives varied. But what about resistance to centralization efforts? How did that figure into the process? One way to address these questions is to look to another example, that of the intriguing Stephen Peet, who operated for a time as a Bureau fieldworker despite having mounted the most sustained public critique of Thomas's mound survey.

By 1880, Peet was a central organizational figure in midwestern archaeological circles. A native Ohioan, he attended Yale Divinity School and Andover Theological Seminary before returning in the early 1870s to Ohio as a Congregationalist minister (Barnhart 1998:125-127). In 1875, he co-founded the State Archaeological Association of Ohio, which mounted a major exhibit for the Philadelphia Centennial Exposition. He helped organize the International Convention of Archaeologists, also in Philadelphia, as well as the first American Anthropological Association (not to be confused with the later organization of the same name)

(Barnhart 1998:134). In 1878 Peet launched *The American Antiquarian* as a “quarterly journal devoted to early American history, ethnology, and archaeology,” and for the first decade of its existence, this widely read periodical filled a void as the leading American venue for publication of ethnological and archaeological literature (Barnhart 1998:140). When Peet moved to the mound-rich state of Wisconsin in 1879, he continued to maintain a watchdog role over the course of Ohio archaeology from his editorial pulpit. Historian Terry Barnhart portrays Peet as a man who lived a deeply conflicted existence when it came to his archaeology. While Peet strongly desired to see archaeology placed on firm scientific footings, he steadfastly maintained a theologically informed approach to history and archaeology that set him at odds with the emerging secular anthropological interests of the American Association for the Advancement of Science. Furthermore, Peet’s Archaeological Association had failed to attract the state support it needed to achieve its principal goal of centralizing Ohio’s haphazard archaeological practices. Given these circumstances it is indeed understandable that Peet regarded the growing Peabody and Bureau of Ethnology activities in Ohio with mixed feelings and therefore monitored those activities closely.

By 1883 he had become openly critical of the Bureau work, both in the pages of the *American Antiquarian* and in correspondence directly with Thomas and others at the Smithsonian. In one editorial Peet expressed his view that Bureau agents were engaged in irresponsible relic hunting solely for the purpose of enlarging the National Museum’s collections and had failed to study monuments in their natural settings in any methodical manner. Smithsonian science, he wrote, “destroys more than it gathers” (Peet 1883:333). This prompted Thomas to write to Peet defending the thoroughness and accuracy of the work conducted by Bureau agents.⁴² Peet was unsatisfied, and in fact had come to see Smithsonian centralization as a process that merely contributed to the haphazard quality of archaeology, and in particular encouraged the shoddy documentation of artifact provenance in the rush to grab specimens (Peet to Thomas, January 8, 1884, Division of Mounds Exploration Records, Box 10, Folder “Stephen D. Peet [Criticizing the Thomas Mound Surveys]”). In an internal memo to Thomas Spencer Baird suspected that at the root of Peet’s agitations lay his desire “to be employed by the Bureau at a good salary, to survey and report on mounds in northwest” (Baird to Thomas, January 14, 1884, Division of Mounds Exploration Records, Box 10, Folder “Stephen D. Peet [Criticizing the Thomas Mound Surveys]”). Peet was certainly struggling to maintain some authority in the face of the Bureau’s increasing presence, and the agitation did not relent. After

permitting Thomas to turn a book review for the *American Antiquarian* into a platform for advertising the Bureau's "Indians built the mounds" position and for promoting the Mound Division's work, Peet ran an editorial in May 1884, in which he unflinchingly denounced the Bureau project (Thomas 1884; Peet 1884e). Not only did he continue pressing the charge of "relic hunting," he now also added that the "grand discovery" about moundbuilders and Indians was not nearly so original to the Bureau as its authorities would have everyone believe (Peet 1884e:206–207; Barnhart 1998:149–157). But the heart of the issue, in Peet's view, remained the Bureau field methods, which were falsely cloaked under the rubric of a "survey," and which contributed to the destruction of mounds and earthworks without making any provisions for protecting and systematically studying them.

As the conflict with the Bureau unfolded, Peet's relationship with the Peabody Museum developed—or perhaps was cultivated—much differently. In September 1883 Putnam had made a reconnaissance of archaeological sites in Wisconsin and Ohio, marking a pronounced shift of Peabody focus to regions outside the Little Miami Valley (Anonymous 1885; Putnam 1973c). Peet accompanied the Peabody director for part of this trip, and he came to hold a deep respect for Putnam's work. In a July 1884 *American Antiquarian* editorial, Peet contrasted Putnam's "thorough exploration of a locality for the sake of information" with the "superficial, haphazard search for relics" (Peet 1884c:277). Significantly, Peet associated Putnam's field methods directly with the intellectual framework of Peabody archaeology, writing that the Peabody director "does not believe that any one tribe or race built the earthworks, and he is therefore anxious to ascertain the tokens left by all the races, and to so explore and examine and collect and arrange so as to leave the characteristics of each separate layer or horizon" (Peet 1884c:277). The implication was that Bureau personnel fit hastily gathered data into a rigidly maintained pre-existing theory and so did not privilege systematic, intensive field investigations. All this was enough to lead Thomas and Baird to suspect privately that Peet was in league with Putnam in order to give the Peabody an advantage in Ohio, and that Putnam may have been "egging" him on (Baird to Thomas, July 29, August 4, and August 21, 1884, Division of Mounds Exploration Records, Box 8, Folder "Referred by S. F. Baird to C. Thomas"). Either way, Baird and Thomas felt the need to monitor closely the developing relationship between Peet and Putnam.⁴³

To whatever motives one might attribute Peet's actions, there was a legitimate basis to his concerns and criticisms about the Bureau project.

Peet had singled out P. W. Norris as one of the Smithsonian's principal relic-hunting offenders, and a few years later Bureau agent Henry Reynolds encountered firsthand evidence during his Ohio work that Norris's field methods had indeed been deplorable (Reynolds to Thomas, January 9, 1888, Division of Mounds Exploration Records, Box 10, Folder "H. L. Reynolds [Ohio] 1888, 1889"). Whether or not Peet's public campaign was the direct cause, the year 1884 did mark a turning point for the Mound Exploring Division. There was a significant turnover in field personnel that included the hiring of Charles Smith.⁴⁴ Also by the end of the year, the Smithsonian planned to issue a new circular explicitly emphasizing the preservation and careful survey of mounds, an act which led Peet to acknowledge that the institution was moving in the right direction (Peet 1884b).

In 1886, at least for a short time, Peet was hired as a Bureau agent. If this was truly what he desired, he was not at all happy with the arrangement, and could be found complaining bitterly about not being paid as much as other agents (Peet to Thomas, June 4, 1886, Division of Mounds Exploration Records, Box 10, Folder "Stephen D. Peet [Re. Fraudulent Tablets]"). So why was he there? Given all that had come before, Peet's involvement in the Bureau survey might be explained simply by the fact that he was ultimately too valuable an asset to be marginalized completely from the process of centralization. But it was also a two-way influence, as Peet wielded considerable authority of his own even if the Bureau eventually won out as the recognized arbiter of archaeological science.

Institutional Authorities Reaching Out

Although I have been predominantly concerned with examining centralization through the lens of correspondent activity in Ohio, Bureau and Peabody authorities took more direct measures to facilitate centralization. One of these was by maintaining ties with locally or regionally situated scholarly organizations within which archaeology was an active concern. For example, Powell, Baird (until his death in 1887), Thomas, and Putnam each were corresponding members of the Ohio State Archaeological and Historical Society after its reorganization in 1885. Putnam also worked closely with the Madisonville Literary and Historical Society, while Thomas, despite differences with Peet, made good use of the *American Antiquarian's* pages. Of course, it makes sense that Thomas and Putnam would seek assistance from those already engaged in the smaller-scale networking of archaeological work in desirable regions. However, the forging of such associations

by institutional authorities created channels that could be intentionally exploited for larger-scale centralizing purposes.

The use of Ohio newspapers was another means by which both Thomas and Putnam engaged the field. Working through the OSAHS, Thomas distributed a strongly worded circular throughout the state's newspapers (Matthew Canfield Read to Thomas, May 19, 1884, and July 1, 1884, Division of Mounds Exploration Records, Box 6, Folder "M. C. Read 1884").⁴⁵ After announcing the scientific value of centralized archaeology, Thomas wrote,

Major Powell, in charge of the U.S. Bureau of Ethnology, has authorized a thorough and scientific exploration and survey of these works, without expense to the archaeologists of the State, only asking their cooperation and the aid of land owners in the way of permission to make thorough explorations.

All persons in the State having knowledge of pre-historic earthworks, fortifications, mounds or burial places in their neighborhood, are earnestly requested to send some one of the undersigned a statement of their character and location, and when the places are visited by the employes [*sic*] of the Ethnological Bureau to aid them in their work, and to secure the permission of land-owners to the thorough exploration of all works found on their premises. All articles found in the explorations will be deposited in the museum of the Smithsonian Institute, becoming the property of the United States, and accessible without expense to all students of American ethnology. Facsimile casts of all specially interesting finds will be deposited in some central museum of the State of Ohio. (*Cincinnati Gazette* n.d. [1884])

Thomas may have expected much from the residents of Ohio in assisting the Bureau, but the strategy was effective. The extensive list of contacts that ended the piece, mainly active members of the OSAHS, established an extensive base network through which Bureau agents secured access to sites and specimens.

Putnam also made use of the press, though to different effect. By mid-decade, the Peabody director had become a highly visible advocate of the preservation of Ohio's mounds and earthworks in the face of their widespread and ongoing destruction. In his Peabody reports as well as through newspapers in New England and Ohio, Putnam warned of the effects of plowing and urged Ohioans to do their patriotic duty to spend money to save remaining monuments before it was too late (Wright 1888; Putnam 1973c:220; Putnam 1973d). While his efforts did not

spark a preservation movement, they did put him in good standing with the state's archaeological community, especially after he successfully negotiated the Peabody's purchase of Serpent Mound in 1887. For three field seasons, Putnam conducted intensive investigations of this site—considered to be one of the most unusual and potentially important in Ohio—and he regularly reported on his work in the press (Anonymous 1888b; Putnam 1890).

Institutional authorities also went out into the field themselves, often with significant consequences for networking. Thomas only occasionally made site inspections or met with agents, and he did not directly supervise or participate in excavations or survey work in any significant sense. This is not to suggest that he did not engage in any form of network building, only to say that his abilities were better suited to directing fieldwork from a distance. Putnam, by contrast, thrived in the environment of the field and spent so much of his time in southern Ohio during the 1880s directly involved in excavations that members of the Ohio State Archaeological and Historical Society could claim in 1887 that he had “more experience than any other living person” investigating Ohio sites (Anonymous 1887:60). As a result, Putnam's views on the specifics of site excavation and documentation were widely considered to represent the “proper” methods (Anonymous 1887:60–62). Putnam's field activities also consisted of network building, and he was tireless in his efforts to establish contacts that might have consequences for Peabody centralization. He regularly traveled through remote areas to visit collectors or landowners, successfully securing vast numbers of artifacts and gaining right-of-exploration privileges to sites (Putnam to Esther Orne Clarke Putnam, May 30, 1887, Putnam Papers, Box 7 [“M–Z”], Folder “P”). Putnam sought out older farmers, to find out what they remembered about mounds that may have existed in the area, and to examine collections gathered from a lifetime of working the land. Some allowed Putnam to help himself to their specimens for the museum. The Peabody director was careful to reciprocate for any help received. To John Lovett, whose farm included Serpent Mound, he arranged regular shipment of Peabody *Reports* even though Lovett's interest in archaeology was lukewarm at best (Putnam, “Notebook E,” Peabody Accession File 88-15, Folder 3). Putnam brought gifts for Lovett's wife and young daughters in exchange for occasional lodgings and meals while excavations got underway on Serpent Mound (Putnam to Esther Orne Clarke Putnam, May 30, 1887, Putnam Papers, Box 7 [“M–Z”], Folder “P”). Certainly these were matters of common courtesy, but such decency and tact greatly facilitated Putnam's work in Ohio, and arguably did give him a certain advantage over the Bureau of Ethnology.

Conclusion

By around 1891 the period of intense archaeological activity on the Ohio mounds came to an end. Thomas became almost wholly absorbed in compiling what was eventually published as the Bureau's eagerly anticipated report on the mound explorations (Thomas 1894).⁴⁶ Putnam's energies were increasingly consumed by preparations for the World's Columbian Exposition anthropological exhibits (Kroeber 1915; Boas 1915). Over the course of the preceding decade, however, the centralizing efforts of both the Smithsonian Bureau of Ethnology and the Peabody Museum had exerted a powerful influence upon the practice and organization of Ohio Valley archaeology. An examination of this episode in the history of archaeology demonstrates at the most basic level the complexities involved when field science institutions take to the field. Accessing sites and specimens requires a broad range of transactions, and in the context of larger-scale centralization efforts, network building becomes a critical component of the process. Archaeological fieldwork thus involves negotiating social topographies every bit as much as it does landscapes and soil layers.

In the case of the Bureau and Peabody work of the 1880s, where museum building and inter-institutional competition shaped the parameters of involvement, institutional authorities capitalized on extant local archaeological networks within their respective efforts. At the same time, the combined effect of these centralizing projects was to open a dynamic social environment that could be exploited by a range of enterprising individuals as conditions changed. And within this scenario institutional authorities had to respond and react to the actions of these individuals. A further feature of the new environment, one that informed interactions within it, had to do with value, in several senses. Individual workers were deemed valuable relative to their usefulness in facilitating centralization. Specimens and field documents acquired scientific value if properly gathered or created. Archaeological objects rapidly took on monetary value in relation to their desirability. Of course value resides in the eyes of its beholders and is a constantly shifting quality. The consequences of being perceived as valuable (or not) for individuals looking to participate in institutional archaeology could be immense. The ripple effect following on shifts in the economy of specimen markets caused by Peabody and Smithsonian activities was significant. Harlan Cresson commented that the "unfortunate price paid by the Smithsonian" for a modest assortment of copper implements, "has made collectors open their eyes" (Cresson to Putnam, December 29, 1890, Putnam Papers, Box 6, Folder C). In the same document, he bemoaned the financial "relic boom" set

off by Putnam's World's Columbian preparations. However construed, increases in value arguably served those at the periphery better than the center. The acquisition of value gave individuals solidity within the fluid centralizing networks.

As I have stated throughout, centralization was not only a matter of accumulation. For both Thomas and Putnam it also meant imposing standards and controls on archaeological practices that contributed to the process of accumulation. It was a means of demarcating scientific institutional archaeology from a hodge-podge of related practices that took place in southern Ohio. Here, sociologist Thomas Gieryn's concept of "boundary work" is applicable: it is a rhetorical "means of social control" by which scientific authorities place and police "boundaries of legitimacy" (Gieryn 1999:16). As Gieryn points out, boundary work usually involves a variety of strategies depending on the circumstances and stakes involved (Gieryn 1999:15-18).⁴⁷ Rhetoric certainly characterized the way Thomas and Putnam both promoted their work as real science, but whatever boundaries were put into place were indefinite at best, or they assumed definition only at particularly needed times as Thomas and Putnam sought to engage or subsume locally situated traditions and practices as part of centralization. The shifting fortunes especially of Stephen Peet (though of other correspondents as well) may well be seen as a function of contested credibility that occurs in boundary work.

And, in fact, behind the rhetorical façade and case-by-case deployment of boundary work, Thomas and Putnam were arguably interested not in policing boundaries, but in keeping them as open as possible at least insofar as movement toward the institutional centers could be maintained. After all, the authorities themselves encouraged or engaged in practices that ran counter to the professed imposition of rigorous scientific controls and standards onto fieldwork and data accumulation. They encouraged completely open participation in the centralization process. Consider, for instance, Thomas's widely printed circular demanding aid from anyone willing to give it, or Putnam's willingness to take specimens that could not possibly have been accompanied by documentation meeting Peabody standards. Such paradoxes of centralization did not go unnoticed either. Stephen Peet, for one, was acutely aware of them, even if he unfairly directed his concerns against Thomas and the Bureau rather than Putnam. Another major axis of Peet's critique probed the epistemological distinction between specimens carefully gathered and documented by qualified Bureau agents during excavations, on the one hand, and objects indiscriminately picked up from the surface combined with "all the mass of donated relics" incessantly making their way to the Smithsonian,

on the other (Peet to Thomas, January 8, 1884, Division of Mounds Exploration Records, Box 10, Folder “Stephen D. Peet [Criticizing the Thomas Mound Surveys]”). For some time Peet was convinced that the Bureau did not differentiate clearly between these classes of materials. At the base of his frustration—anger, even—was a conviction that the rules of centralization had to be applied unequivocally across the board, or they were useless or even detrimental. The fact that Peet did not criticize Putnam or the Peabody highlights the positional quality of field networks in the service of centralization. These are dimensional social spaces shaped and distorted by the gravitational pull of institutional centers, and one’s location within makes all the difference.

Notes

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1. For a good overview, see, for example, Atwater 1820; Squier and Davis 1848; Haven 1856; and Thomas 1894.

2. For three contrasting recent accounts of how the Euro-American invention of the “moundbuilders” figured into broader intellectual and political discourses about Native Americans, see Silverberg 1968; Mann 2003; and Conn 2004. For a focused account of how moundbuilder debates informed the organization and activities of localized Ohio archaeological practitioners, see Barnhart 1998, 2005.

3. A number of historians have examined the role of the Smithsonian Institution (and associated Bureau of Ethnology) and the Peabody Museum of American Archaeology and Ethnology within the broader contexts of the institutionalization and professionalization of American anthropology. See Tax 1973; Browman 2002a; Hinsley 1985; Meltzer 1998; and Barnhart 2005. For the fullest account of the linguistic and ethnographic work at Smithsonian and early Bureau of Ethnology, see Hinsley 1994.

4. A now-standard model for conceptualizing the centralization and accumulation of geographically dispersed scientific facts is Bruno Latour’s notion of “centers of calculation” (Latour 1987, chapter 6, especially pp. 219–223).

5. On field networks as modes of knowledge production see Vetter 2005, especially chapter 3. A number of other helpful sources explore complex relationships between center and periphery in scientific practice, and address issues of authority and participation in the production of scientific knowledge. These include Inkster and Morrell 1983; Rusnock 1999; Outram 1996; Sheets-Pyenson 1988; Spary 2000; Endersby 2001; and Alberti 2002.

6. Institutional authorities were distinctly engaged in what sociologist Thomas Gieryn has called the rhetorical activity of “boundary work.” See Gieryn 1999:1–35.

7. By limiting the scope of analysis to the region of southern Ohio, I am drawing on recent methodological developments in the history and sociology of science that emphasize place and locality in the production of scientific knowledge and that also seek to open the field sciences to the same levels of empirical scrutiny that have been applied to the laboratory. See, for example, Livingstone 2003; Smith and Agar 1998; Kohler 2002; Alberti 2001; Kuklick and Kohler 1996; Vetter 2005.

8. On the centrality of farming to the colonial development of Ohio, see Hurt 1996: 344–347; Jones 1983, especially chapter 2. According to Ohio historian George Knepper, there were 247,189 farms with an average size of ninety-nine acres (Knepper 1997:287).

9. In the 1830s, the task of surveying Ohio's ancient works was included as part of the Geological Survey of the State of Ohio, attesting to the extent to which these sites were seen as common topographic features of the landscape. See Anonymous 1838:347–364.

10. Also see Putnam 1973c; Wright 1888; James D. Middleton to Cyrus Thomas, 1 July 1888, Division of Mounds Exploration Records, Folder “J. D. Middleton, Ross and Licking Counties, 1888–9” (any of Middleton's other correspondence in this folder are also relevant).

11. On the impact of the Centennial in the formation of the museum, see the series of Secretary's reports opening each of the *Smithsonian Annual Reports* for the years 1875–80. As Curtis Hinsley points out, the 1870s were crucial formative years for the Smithsonian, and the question of how to accommodate anthropology became central to the entire National Museum ideal. See Hinsley 1994:83–123. For a more recent account of the significance of the Centennial not just for the Smithsonian but as part of a broader museum movement and epistemic shift toward object-based knowledge in the United States, see Conn 1998.

12. For a thought-provoking account of the significance of Powell's survey work from the perspective of historical geography, see Kirsch 2002.

13. On the development of the Smithsonian's correspondence networks for general natural history see Goldstein 1994; Rivinus and Youssef 1992.

14. Daniel Wilson, in an 1877 address to the newly formed subsection of anthropology of the American Association for the Advancement of Science, praised the Peabody Museum for its support of research along these lines (see Wilson 1878). Wilson himself had similarly critiqued the full breadth of ethnological science earlier in the century, although the brunt of his critique was directed toward Samuel Morton's craniometry (see Wilson 1858; Burns 2006a).

15. For an early published articulation of the Bureau's position, see Thomas 1884.

16. Scientific contemporaries found the Peabody and Bureau approaches to the mounds representative of two emerging “schools” of anthropological thought in the United States. See Wallace 1887.

17. Name of paper and date of publication verified through accompanying correspondence of Read to Thomas, July 1, 1884, Division of Mounds Exploration Records, Box 6, Folder “M. C. Read 1884.”

18. When the Peabody Museum first opened, Smithsonian secretary Joseph Henry optimistically called for a “union of effort” between it and the Smithsonian “to extensively examine the [ancient] monuments and collect all the relics, to illustrate as fully as possible the archaeology and ethnology of the American continent.” See Henry 1868:26. The two institutions did subsequently operate in a generally cooperative spirit, jointly participating in organized government expeditions and exchanging specimens, but when it came to the mound work of the 1880s, competition was a defining feature.

19. I should note that I am using the term “correspondent community” here and throughout to refer specifically to the range of individuals who became the trusted and valued fieldworkers for the Peabody and Bureau. I apply it equally to individuals who were part of Putnam's “correspondence school” as well as to those who worked as “agents” of the Bureau's Mound Exploring Division.

20. For further details on Putnam's lectures (he had developed thirty-eight separate archaeology-related topics), see Browman 2002a:217–219; Browman 2002b:246–247.

21. On Metz's general place in Putnam's "correspondence school" see Hinsley 1992: 130-132; Barnhart 1998:147-149.
22. Earlier in 1888 Metz expressed at least a bit of concern that Putnam was becoming too engrossed in the Serpent Mound project and momentum on the Turner work was being lost. Metz to Putnam, March 16, 1888, Peabody Accession File 88-55, Folder "Expedition to Ohio-Serpent Mound."
23. I have additionally followed in detail the Peabody explorations at Serpent Mound, Ohio, over three field seasons in the late 1880s utilizing archival correspondence and field notes. See Burns 2006b:270-353.
24. Some biographical information on Smith may be found under the entry for "Gerard Fowke" in Coyle 1962. Much of what I know about Smith's life in the 1880s is derived from his correspondence, some of which is cited below.
25. Putnam reported on an extended reconnaissance of archaeological sites in both Wisconsin and Ohio at the October 21, 1883, meeting of the American Antiquarian Society. For a transcript of this account, see Anonymous 1885. Putnam shortly afterward published a fuller account of the trip in the Peabody Reports in which he explicitly expressed that "it has been my desire to examine the ancient works of the Scioto and Paint Creek valleys, many of which have become so well known from the oft-repeated descriptions and figures given by Atwater in 1820, and by Squier and Davis in their valuable work of 1848" (Putnam 1973c:218).
26. See, for instance, Baird to Thomas, July 29 and 4 August 4, 1884, Division of Mounds Exploration Records, Box 8, Folder "Referred by S.F. Baird to C. Thomas." Baird and Thomas also at least entertained the possibility of approaching Metz in order to obtain a collection from him, but this seems not to have transpired.
27. McFarland to Powell, September 21, 1884; Smith to Baird, August 22, 1884; Smith to Powell, September 15, 1884; and Smith to Thomas, September 29, 1884, all from Division of Mounds Exploration Records, Box 5, Folder "Charles M. Smith Correspondence, 1884-1887."
28. On the background of this organization, see Barnhart 1998.
29. See Anonymous 1889:533. By this time Smith had changed his name to Gerard Fowke. His articles were Fowke 1889b; Fowke 1889a.
30. See, for example, Smith to Thomas, May 9, 1885, July 10, 1885, and November 29, 1886, Division of Mounds Exploration Records, Box 5, Folder "Charles M. Smith Correspondence, 1884-1887."
31. According to one source, Gerard Fowke was the name of a maternal ancestor (Coyle 1962:224).
32. Fowke remained in archaeology, too, although not with the Bureau. Shortly after the turn of the century, he could be found working for the Missouri Historical Society where he conducted his own survey exploration of mound sites in the Missouri River valley. See O'Brien 1996:124-38.
33. Lukewarm reviews included Randall 1903; Moorehead 1902. Condemnatory reviews included Peet 1902; McLean 1902.
34. Also see Reynolds's correspondence with Thomas in Division of Mounds Exploration Records, Box 10, Folder "H. L. Reynolds."
35. The purpose of the resurvey was to correct the supposed misperception that mound-builders possessed some "advanced" knowledge of geometry, an assumption reinforced by Squier and Davis's depictions of certain works as perfectly regular circles or polygons.
36. See, for example, Reynolds to Thomas, February 28 and March 29, 1887, Division

of Mounds Exploration Records, Box 10, Folder "H. L. Reynolds (Ohio, Minn., Wisc.) 1886, 1887."

37. More on Cresson's background may be found in Williams 1991:123–129. According to Williams, Cresson was on the Peabody books as "Field Assistant" from 1887.

38. According to this letter, Cresson's family had earlier loaned a number of specimens to the Smithsonian National Museum, and he worried that Putnam would view him as an ally of that institution rather than of the Peabody. Cresson felt the need to explain to Putnam that his trips to Washington had been undertaken with the intent of reclaiming his specimens so that they might go to the Peabody instead.

39. On the late-nineteenth-century rise of entrepreneurial natural history in the United States, see Barrow Jr. 2000. More so than Charles Smith, Moorehead fits Barrow's description of the rising numbers of enthusiastic for-profit specimen dealers of the period.

40. Moorehead reported to Putnam that he had spent one week working at Fort Ancient in 1886, ten days in 1887, two weeks in 1888, and thirteen weeks in 1889. Moorehead to Putnam, August 26, 1889, Putnam Papers, Box 7, Folder M.

41. Reasons for the lack of access seem to have been bound up with the sale of tracts of land containing substantial portions of the site. It is possible that landowners recognized the archaeological value of the land in monetary terms and were not willing to grant access to institutions conceivably capable of paying. See, for example, Metz to Putnam, March 15, 1888, Peabody Accession File 88-55, Folder "Expedition to Ohio-Serpent Mound;" and Moorehead to Putnam, May 9, 1888, Putnam Papers, Box 7, Folder M.

42. Peet reprinted letters from Thomas dated January 1 and January 12, 1884, in *The American Antiquarian*. See Peet 1884a, 1884d, respectively.

43. For instance, Baird made good use of his influence at the Wood's Hole oceanographic laboratory to acquire a copy of a letter written by Putnam to botanist and Harvard trustee Asa Gray (dated August 15, 1884), in which Putnam expressed concern that the "destructive presence" of Bureau agents in the Little Miami Valley was threatening Peabody work there. Baird forwarded the copy to Thomas with the note, "Please keep it with your other files." Baird to Thomas, August 21, 1884, Division of Mounds Exploration Records, Box 8, Folder "Referred by S. F. Baird to C. Thomas."

44. On changing personnel, see *Smithsonian Annual Report for 1884*:67–68.

45. Read was a geologist and trustee of the OSAHS who sometimes worked as a Bureau agent.

46. Also see Anonymous 1910.

47. Gieryn's generic strategies are "expulsion," "expansion," and "protection of autonomy."

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