The Co-production of Archaeological Knowledge: The Essential Relationship of Amateurs and Professionals in 20th Century American Archaeology

La coproducción del conocimiento arqueológico: la relación esencial entre aficionados y profesionales en la arqueología norteamericana durante el siglo XX

Andrew L. Christenson

Archaeological Consultant Prescott, Arizona alchristenson@cableone.net

Recibido: 26-04-2013 Aceptado: 20-06-2013

Abstract

The process of professionalization in American archaeology naturally created boundaries between insiders and outsiders, with insiders having special training or degrees and institutional affiliation and employment. Amateur archaeologists, with their intimate knowledge of sites and the landscapes into which they are situated, were actively involved in trying to understand the archaeological record but were often treated as outsiders even though their insights were critical to archaeological understanding. Unfortunately, some historians of the field have taken such boundary work by professionals as given, thus writing out an important group of archaeological researchers. Using selected examples, this paper suggests the concept of "co-production of knowledge" as a useful way of thinking about the interaction of amateurs and professionals.

Key words: Amateur archaeology. Co-production of knowledge. Professionalization. Boundary work.

RESUMEN

El proceso de profesionalización de la arqueología norteamericana creó una división inevitable entre aficionados y profesionales. Por un lado, los arqueólogos profesionales recibieron una educación específica y se integraron en instituciones académicas y universidades. Por otro lado, los arqueólogos aficionados, con su conocimiento profundo de los yacimientos arqueológicos y de su contexto, fueron tratados a menudo como intrusos a pesar de que participaron activamente en la interpretación del registro arqueológico. Desgraciadamente, algunos historiadores de la arqueología han tomado dicha división por algo natural y, de este modo, han excluido a un grupo importante de arqueólogos. Utilizando ejemplos concretos, este artículo sugiere que el concepto de 'coproducción del conocimiento' constituye una herramienta muy útil para pensar sobre la relación entre aficionados y profesionales.

PALABRAS CLAVE: Arqueología aficionados. Coproducción del conocimiento. Profesionalización. Divisiones profesionales.

1. Introduction

Archeology¹ is exceptional among the professions in the degree to which persons without advanced degrees can and do contribute to the accumulation and interpretation of knowledge in the subject (McGimsey 1972: 9).

Boundary-making is ever-present in all levels of human societies (Lamont and Molnár 2002). The processes of professionalization in a field of study are one area where boundaries are created both intentionally and unintentionally. Intentional boundaries, which Nakavama (1984: 142-46) argues comes from professional consciousness, include requirement of certification or a degree, membership in specific organizations, affiliation with specific institutions, and the control of publication outlets. Unintentional boundaries may be created by geographic localization of institutions, use of a specialized language in communication, lack of access of funding to people outside the boundaries, and so on. Thus, professionalization by its very nature creates insiders and outsiders. The focus of this paper is how the process of professionalization in American² archaeology has sometimes excluded people, called amateur³ archaeologists, who contribute materially to the field's mission. It also argues that archaeology is a prime example of how knowledge is co-produced from interaction of professional archaeologists, amateur archaeologists, and even the lay public⁴.

For this discussion, archaeology is a field of study focused on understanding the past through examination of the archaeological record in the present⁵ Individuals working in archaeology – archaeologists - study the archaeological record to gain such understanding. Some archaeologists make their living doing such work – professional archaeologists – and others do it as a pastime –amateur archaeologists. I will use the term "archaeologist" for people in both groups unless there is a reason to differentiate one from the other.

2. Professionalization

The process of professionalization in American archaeology can be said to have formally begun with the first training program at Harvard University in 1892, although professionals existed a couple of decades earlier. The shift from self-training to advanced training in a university setting is considered to be one of the major revolutions of science (Cohen 1985: 92) and by one perspective, a way of keeping amateurs away (Nakayama 1984: 143). A necessary step in professionalization is also the existence of opportunities for employment. If archaeological research is restricted to a few wealthy individuals or people who can only pursue study during off-hours, accumulation of knowledge will be slow. Creation of places where people can discuss findings (society meetings and publications), where collections can be housed, arranged, and studied (museums), and where specialized training can occur and degrees awarded (colleges and universities) will follow in step as interest increases. The last two of these places are also where people who are not wealthy can make a living.

Part of the professionalization process is "the deepening of shared experience" (Bruce 1987: 151). Persons with similar training and high interaction through attendance of meetings, publication in the same journals, and correspondence will tend to share ways of viewing the world (what Kuhn [1970: 11] calls "shared paradigms"), methods of studying the world, and even language difference that will operate, intentionally or unintentionally, to exclude people who are not interacting with them. Such exclusion occurs at various levels from that of a collaboration group or "invisible college" (Crane 1972:34-5) within portions of a field, to that between professional and amateur, the focus of this paper.

While the possession of an advanced degree ultimately became an easy criterion for determining inclusion or exclusion, during the early years very few archaeologists had degrees in anthropology (Christenson 2011: 17) and specialization in archaeology was not common. So at that time other criteria were used to include and exclude - a job at a museum was probably a major criteria (Christenson 2011), as would have been attendance a national meetings and publication in scientific journals, but the boundary was quite porous (Hinsley 1985: 68-69). Membership in organizations such as the American Association for the Advancement of Science or the Washington Anthropological Society and publication in their journals (Science; American Anthropologist) created a group of scholars who communicated and interacted – the beginnings of a scientific community (Darnell 1971; Hinsley 1976).

One critical concern in the process of professionalization is the perceived need to gain some control over questions asked, accepted methods and theories for solution of these questions, and ways of dealing with deviance from the accepted norms (Hagstrom 1965: 12). Such boundary work, as it has been called (Lamont and Molnar 2002: 178-180), is entirely understandable behavior, but overly tight boundaries can create serious problems (Sperber 1990: 91).

Boundary work in the incipient profession of archaeology can be seen in the sometimes acrimonious debate about Pleistocene (glacial) "man" in North America waged in the 1870s to 1890s between scholars like W. H. Holmes (an artist turned geologist and archaeologist), C. C. Abbott (a medical doctor turned archaeologist), and George F. Wright (a theologian with field training in geology and an interest in archaeology). Holmes felt that the individuals finding what they thought was evidence of glacial or late glacial artifacts were not geologists and did not understand the context of the artifacts. The fact that none of the three principal players in this controversy had formal training in their areas of research is typical of this time period when most researchers were trained by working in the field⁶. Although each side was both right and wrong, the Pleistocene "man" supporters were pretty much silenced by 1900 based upon the apparent weight of Holmes' arguments and, importantly, his status as a government archaeologist (Meltzer 1983: 24). Thus, Early "Man" was off the research agenda until it returned after finds made by nonarchaeologists at Folsom, New Mexico. The son of one of those on the losing side of the controversy commented on the monopolization of scientific research by institutions, evidence of boundary work -

> One class of scientific investigators has been pushed to the wall, -- the independent observer who has to do other work for a living. The feeling seems to be prevalent in many of these large institutions that the observations of any one who is not devoting his entire time to scientific research are valueless. And in many cases they consider that the boundary of their own institution marks the limit of all scientific accuracy (Wright 1910: 80).

3. Amateur and professional: differences in knowledge and power

Professionals "monopolize authority and expertise" (Alberti 2001: 132) by control of education, the methods and theories to be applied to interpretation, access to media and to places where their data can be housed for future use. Professionalization requires and gives precedence to individuals spending much of their time working in archaeology, reading and contributing to the literature, attending meetings, and being associated with an institution. Thus certain advantages accrue to the professional that are unavailable to the amateur, a form of social stratification (Nickerson 1962). Also, because of this balance of authority, the amateur will have to work harder to get an idea accepted (McGimsey 1972: 10).

Even with various disadvantages, the amateur will often have more intimate knowledge of the local landscape, a crucial area of expertise in understanding the archaeological record. Archaeology and other field sciences fit well into the lives of people "whose habits of life bring them into daily contact with the soil" (Wilson 1888: 2; see also Alberti 2001: 136 for a similar statement regarding English natural history). Some archaeological patterns will be obvious to people who encounter them frequently in their daily lives while they may require more time and deliberation to someone exposed to them infrequently. As an early example, people who lived on the coasts of the eastern U.S. in the first half of the 19th century, knew that shell middens were human-made and that the association of shell concentrations and artifacts was not accidental (admittedly this may have taken years to realize), while geologists and other natural historians (archaeology did not exist as a separate discipline at that time) had to ponder their origin, and early on often incorrectly concluded that they were natural (Christenson 1985).

Such local knowledge comes from long experience with and observation of the natural world, including archaeological remains, not from scientific training. We could call this folk archaeological knowledge⁷. This knowledge is firmly based upon concrete things like artifacts and site locations and simple distribution patterns. Coming from longterm living on and observing the landscape, this understanding is in some ways deeper than a professional archaeologist can gain from training, but of course focused training has its advantages as well. My own experience is that local archaeological expertise and understanding is weakest where it is not backed by the comparative method, the essential core of anthropology and archaeology, which allows placing the archaeological record into a broader context. Thus, both amateurs and professionals have much to gain by close interaction.

Herr (1999: Chapter 2) uses exchange as a way of viewing the amateur (who she calls "practitioner")/professional relationship. Amateurs have artifact collections, personal contacts, and familiarity with particular sites and, we should add, with the landscape within which the sites occur. They are also usually in the best position to help preserve archaeological sites and to help educate the general public about their importance (Lipe 1974: 220). In exchange, professionals have broad anthropological knowledge, access to scholarly literature and outlets for publication, and nationwide contact with colleagues. To this list we can add better access to funding, access to "tools of research" such as equipment and facilities unavailable to the amateur (Nakayama 1985: 143), and a developed terminology for analysis and classification.

Even with their strength of local knowledge, amateurs would generally be in the position of followers to the lead of professionals, but examples of amateurs being leaders are not uncommon - George Langford, an engineer with experience as an amateur paleontologist, was the first to show the existence of archaeological stratigraphy in Illinois at a time when stratigraphy was believed by professionals not to exist, but his pioneering work has faded from view (Christenson 2003); J. W. Simmons, a construction worker, collected in a little-known area of central Arizona and got professionals interested in it, but he ended up losing credit for his pioneering work (Christenson 2005); Roland W. Robbins, a self-trained expert in Colonial ironworks, never finished high school but was a pioneer consultant in historical archaeology and in getting the public involved in digging sites, many years in advance of the profession (Linebaugh 2005), but until recently he was ignored in histories of his speciality; and Russell A. Johnson, a farmer, was fortunate to document Paleoindian artifacts in blowout areas of Alberta in the 1930s and was the first to discern what is called the Cody Complex, for which he has been duly recognized (Wormington 1957: 132, 134). Many more examples can be cited around North America and the World, indicating the essential contribution of amateurs to understanding the archaeological record.

4. Amateurization

Social stratification can lead to elitism (e.g. in England, Levine 1986: 38), which can work in both

directions. Reaction by amateurs to "ivory tower" scholars or "armchair theorists" led in some cases to their prioritizing local over imported knowledge and interpretation and to carrying their amateur status as a "banner of distinction," a process, amateurization, that happened with Australian antiquarians of the late Victorian era (Griffiths 1996: 67), but is also evident in 20th century North American archaeology. In English natural history the rise of professional biology with a strong emphasis upon laboratory work, forced some amateur natural historians to refashion their practices to assure a role in the advancement of knowledge (Alberti 2001: 133). In England this was done through the numerous and large natural history societies. In the U.S. archaeological societies usually at the state level have often been the way in which amateurs pursued their interests but are also places where research done by amateurs and professionals is integrated.

It is probably not coincidental that around the same decade that senior anthropologists were debating and disagreeing about membership boundaries, "amateurs," a term that was actually little used at this time, were complaining about being excluded (see quote above by Wright). The International Society of Archaeologists (ISA), which, in spite of the name, was restricted primarily to the American Midwest, was created in 1909 apparently to counter the perceived exclusion of some amateurs from the archaeological process (figure 1).

As indicated, among their objectives were "to bring to light the unknown investigator," surely a reaction to the growing group of professionals who were hogging the limelight in archaeological work. Note also #6 which aims to expose fraudulent artifacts and their makers. The buying and selling of artifacts became such a big business by the end of

ARTICLE II. OBJECTS.

The object of this corporation and the proposed plan of doing business are as follows:

- 1. To encourage the study of archaeology as a science.
- 2. To encourage the preservation of mounds, etc.
- 3. To bring to light the unknown investigator.
- 4. To unite the collectors and students for mutual aid and protection.
- 5. To lessen as much as possible the reckless opening of Indian graves and mounds.
- 6. To expose frauds and makers of fake relics.

Table 1. The Objectives of the International Society of Archaeologists as listed in their incorporation papers, 1912.

the 19th century that fake relics were a major problem to some. The ISA registered its members – prospective members had to be recommended by an existing member and were scrutinized by the membership. Applications were rejected if evidence was found that the applicant had sold fake artifacts. Existing members caught selling such artifacts were expelled, including the California member who was paying Indians to make "fake" Indian artifacts (*The Archaeological Bulletin* Vol. 2, No. 3, p. 84, 1911). Today we might reward such an enterprising person for providing gainful employment and not disturbing the archaeological record!

Unfortunately, the ISA leaned more strongly toward the collector than toward the investigator and science sometimes got pushed aside by the obsession for artifacts, a problem also encountered by British and Australian archaeologists (Fagan 2001: 44; Griffiths 1996: 74, 76). Personal collecting is a fairly solid boundary that distinguishes professionals from many amateur archaeologists. Eli Lilly, the pharmaceutical magnate, recognized the issue in 1932. A letter to his artifact dealer says, "For better or for worse, I have cast my lot with the scientific archaeologists and, as a result of that, I have stopped buying from all sources, and particularly those from which I am unable to obtain the exact descriptions of the locations and manner of excavation..." He concludes "you stand on the other side of the fence" (Madison 1988: 3). What apparently led to this change in behavior was increased association with individuals of the Indiana Historical Society who had a serious interest in archaeology. Rather than continuing to put his money into artifacts he began to pay the salary of an archaeologist and support publications on Indiana archaeology.

Clearly Lilly viewed the buying and selling of artifacts without provenience as a primary boundary-delimiting behavior. Archaeologists of the time certainly did as well, with Halseth (1928: 12) being an extreme case - "no individual has the moral right to ownership of prehistoric relics" (see also Parker 1923: 8). Clark Wissler, at one of the National Research Council's archaeological conferences (see below), was apparently responding to the demonization⁸ of collectors going on among professional archaeologists at the time (and still today), by arguing that "collecting is indicative of a tendency to learn by dealing first hand with things", that "everyone is a collector in tendency", and that "collecting is but a manifestation of a deep, spontaneous human interest" (Wissler 1929: 45, 47, 48; see also Schnapp 1997: 12-13). Wissler wanted to humanize collectors (he was one as a kid growing up) but of course also wanted to emphasize the need to make

sure their collections could provide a significant resource for research (see McGimsey 1972: 10-11).

Archaeological ethics were a background issue that were beginning to receive some discussion, but were usually implicit rather than explicit. All archaeologists have ethical responsibilities and McGimsey (1972: 7-9) argues that anyone who handles or affects the archaeological record has the responsibility "to examine his knowledge, his conscience, and his actions to determine if his activities are detrimental to the public good." Although he gives the amateur a responsibility "to hold his own archaeological activity within the bounds of his knowledge," the same stipulation applies to the professional.

Of interest in the discussion of amateurization is the extent to which amateur archaeology attempted to refashion its contributions to archaeology. An area of archaeology in the U.S. where amateur contributions outnumber professional ones is in the recording and interpretation of rock art. In part this phenomenon is the result of amateurs stepping into an area of the archaeological record left "understaffed" by professionals. In my region I see that amateurs often have training in the areas of digital image processing and computer analysis that are now a necessity in rock art recording and interpretation and they often have more time for such labor-intensive work than professionals. Experimental archaeology is another area of research where amateurs have been leaders.

An interesting question that requires research is the extent to which amateurs have developed terminology either unique to themselves or even more interesting transferred to professionals⁹ Even with the common complaints about archaeological jargon, certainly not restricted to amateurs, there is naturally going to be more deference of amateurs to professional language, techniques, and explanation, than vice versa. A related issue is that professionals have resisted giving their personal names to artifact types or periods, but have given the names of amateurs (Over, Titterington, Langford) to such archaeological concepts.

5. Archaeological societies as points of amateurprofessional contact

Diversity was built into American archaeology early on through organizations and their journals because simple economics made it impossible for these organizations to limit membership to professionals (Stocking 1960: 3). Boundary work in 1902 by scholars such as Franz Boas and Frederic W. Putnam to restrict membership in the American Anthropological Association (AAA) to professionals was found to be too limiting. Its meetings and journal, *American Anthropologist*, were major forums for American archaeology, both amateur and professional, until the mid1930s.

Local archaeological or scientific societies were early forums for discussion of archaeological findings before a profession existed with the midwestern U. S. having such groups in Iowa (Davenport Academy, 1869), Indiana (State Archaeological Association, 1875), and Wisconsin (Lapham Archaeological Society, 1877), and elsewhere. As these organizations began to produce journals, their importance in the accumulation of archaeological knowledge became significant and, although they started with primarily amateur membership, they always fostered close relationships with professionals (for one good example, see Chapman 1985). The Texas Archeological and Paleontological Society was formed by amateur archaeologists when there was only one professional working in the state and was and still is a major facilitator of communication between everyone doing archaeology there, although professional involvement has increased through time (Davis 1980).

Growth of archaeology in the 1920s and 30s, both amateur and professional, led to a need for coordination at the national level. The National Research Council's Committee of State Archaeological Surveys was formed to provide some guidance to the disparate groups doing fieldwork through conferences and booklets providing guidance for site recording (Herr 1999; O'Brien and Lyman 2001). Its aims and activities were taken up by the Society for American Archaeology (SAA) established in 1934 (Griffin 1985: 261).

An important goal of the SAA was to bring together everyone interested in archaeology and perhaps as a statement, the lead article in the first American Antiquity was by amateur archaeologist and collector, Paul F. Titterington. Membership in the society was open to everyone, but a category of "Fellow" was created that required nomination by an existing Fellow. This seems to have been an attempt to create ranking within the society, although amateurs did become fellows and the hierarchy was eliminated fairly quickly. From 1939 to 1942 the SAA published the Notebook, a mimeographed forum for exchange of information that was particularly aimed at involving the nonprofessional in discussions about terminology, field recording, and so on¹⁰. This newsletter may have been a response to readers of American Antiquity who were put off by "the big words used, many of them of French or Latin origin" (SAA Notebook, March 15, 1939, p. 12). I have argued that the creation of a special

technical vocabulary was slow to develop in American archaeology and, with an occasional exception, there is little evidence of vocabulary being explicitly used to exclude people (Christenson 2011: 16). Through time, however, the need for specific terminology for artifacts, cultures, and explanations served unintentionally to exclude those not willing to take the trouble to learn it, including some professionals. With all the archaeology being done as the result of the New Deal, there was naturally an explosion of new terms.

The vast growth in archaeology after World War II led to the proportionate decrease in amateur involvement in the SAA, but the number and size of state and regional archaeological groups with mostly amateur membership increased greatly. Belatedly, in 1985 the SAA initiated the [Don] Crabtree Award for contributions to American archaeology by an avocational. It was named for a self-trained flintknapper and major contributor to experimental archaeology.

6. Amateurs in the history of archaeology

Through the last century, regardless of occasional efforts of some professionals to alter the situation, amateurs have been ever-present in archaeology – in fieldwork, in analysis, and in publication - often in close coordination with professionals, but sometimes fairly independent. Often, though, it is difficult to discern this contribution, especially if one concentrates on national level publications.

Willey and Sabloff's A History of American Archaeology (1980) has been cited as under representing the contribution of women in the field (Kehoe 1989: 105) and the volume is equally deficient in mentioning the contribution of amateurs in the 20th century. W. D. Strong is credited with important advance in understanding Plains cultural development based upon work assembled by "ethnologists and amateur archaeologists" (1980: 108), but this mention of Strong in relation to amateurs is significant as he is sometimes given credit for ideas that actually came from resident amateurs (Helgevold 1981: 35-6). As noted above, one aspect of the existence of a scholarly community is that it gives members easier access to resources such as journals and society meetings where their research can be more widely known and cited. Strong's An Introduction to Nebraska Archeology (1935) was published by the Smithsonian Institution and was widely available across the country. He used the extremely important work of A. T. Hill and William H. Over, neither of whom published, and the end result is that they effectively disap-

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pear from the record to the researcher who does not know the inside story.

Strong actually worked very closely with, and was strongly supportive of, the local amateur community (Herr 1999: Chapter 2). In the original planning for the first Plains Conference (called the Vermillion Conference), Strong suggested inviting many amateurs who were active in research. Apparently because of the influence of co-organizer Carl E. Guthe, the actual invitees were mostly professionals (Wedel 1982: 29-34), suggesting conflict between a vision of local archaeological communities made up mostly of amateurs and of a national archaeological community made up mostly or solely of professionals.

The long, complex, and essential relationship of amateurs and professionals in American archaeology has received attention primarily at the state and local levels. Histories of the discipline, especially those at the regional or national level, tend to be professional-centered and subject to "the Matthew Effect" (Merton 1968), where credit tends to be given to the better-known, published scholar (i.e. professional).

7. Archaeology as the co-production of knowledge

Callon (1999) developed a model of three levels of participation by lay-people in scientific and technological debates. Although he was specifically focused upon applications of medical technology, the basic idea can be used to consider the relationship of at least a certain portion of the lay public (i.e., amateur archaeologists) with professional archaeologists. Model 1 is the unidirectional model whereby science is a world unto itself and its purpose is to teach the undifferentiated public but has nothing to learn from it. This might be called the "ivory tower" model that Kuhn (1970: 164-165) argues is needed to insulate scientists from sociopolitical pressures (Merton [1973: 260] calls this the "purity of science"). There are serious difficulties with such a model, especially when we consider social sciences (Sperber 1990: 89-91).

Model 2 views the public as diverse and that a subset of it has knowledge and experience that allow debate and exchange between it and scientists. This might be called the intermediate co-production of knowledge model. Finally, Model 3 is the idea that there are "concerned groups" (in Callon's case, groups of patients with similar medical issues and their relatives) who are *essential* in the production of knowledge. The analogous group in archaeology would be amateurs with knowledge about a specific archaeological topic or geographic area. This model is the full co-production of knowledge.

We can see in the history of American anthropology/archaeology varying behaviors of professionals representing beliefs in one or the other of these models. The early attempt to limit membership in the American Anthropological Association or restrict attendance of the first Plains conference can be seen as the Model 1 approach. Much of what happened in the past and still occurs today is the cooperation of amateurs and professionals in many areas of data gathering, excavation, etc. (generally professionals working with amateur assistance), but less often in writing up, publishing, and getting credit, a version of Model 2. There are, however, numerous examples where amateurs work on an equal basis with professionals and in some cases take the lead and in these cases we can argue that the full co-production of knowledge (Model 3) is occurring (Meyer 2008: 38).

Knowledge of the past has never come strictly from scholars in their "ivory towers" or from "the people" with their intimate knowledge of the landscape. Both sources of understanding have always been necessary and it is the combination of theoretical and practical understanding, not always held by a single individual, which results in the coproduction of knowledge. Of course with increased specialization of expertise among professionals, all knowledge is co-produced in a sense, but in some areas of science production of knowledge rests not just in the hands of co-professionals but also in those of a segment of the public, the specific use of the term co-production here.

As briefly indicated in the previous section, such relationships can be clearly discerned in some cases, but in others are missing or obscured. Archaeological histories that have an institutional focus, focus on development of method and theory, or operate at a national or world scale tend to leave a false impression of how archaeological knowledge is created because amateur contributions may be intentionally or unintentionally written out. Some of this historical bias comes from viewing professionally-produced knowledge as the determinant of historical significance (Goldstein 1994: 592) and some comes from using only the published record as the principal determinant. Thus, the boundary work of professionalization can lead to restricting the scope of historical research even though archaeological knowledge and understanding is produced both inside and outside the fluctuating and porous boundaries created by the profession.

Notes

1. Americans spell archaeology two ways - with (normal) and without (US government and in some states) the second "a". I use both a's when speaking for myself, but use one "a" when quoting or when citing a reference that spells it that way.

2. I focus upon archaeology in the United States, but will cite other countries as appropriate.

3. For the period that I am considering, primarily the first half of the 20th century, the term "amateur" is used exclusively. At some point after the middle of the century the euphemism "avocational" was often substituted for amateur, but I will retain the traditional term in this paper.

4. Co-production of archaeological knowledge could also be expanded to include information from modern descendants of the culture being studied, i.e., ethnoarchaeology, but this paper will exclude that source of information.

5. I will not grapple here with the issue of the specific meanings of "understanding" and "archaeological record."

6. I consider both Holmes and Abbott to have been professional archaeologists at the time of the debate and Wright to have been a geologist with a strong interest in archaeology (Christenson 2011: Table 1).

7. It is important to distinguish such information gained from close experience from what might be called "folk-lore" based upon incorrect, or at least unsupported, interpretations of the archaeological record.

8. McGimsey (1972: 8) talks about professionals using a "black brush" to paint the entire public. Such stereotyping has worked both ways, as there are amateur archaeologists who are contemptuous of professionals, an extreme case being I. F. "Zeke" Flora (Lister 1997: 72-3) but even including the first professional consultant in historical archaeology, Roland Robbins (Linebaugh 2005: 51-4).

9. "Bird point," a very small projectile point, is a term that appears in the amateur literature that is never used by professionals.

10. Herr (1999) suggests that this ideal was not really possible because of the perception that professionals were ready to pounce on anything they saw wrong. This intimidation factor still operates and even influences decisions by professionals to publish.

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