

# Potlatch and Potluck: Potshots at Recent Writings on Archaeological Ceramic Technology

*Louise M. Senior*

**Abstract.** Two anthologies of archaeological ceramic-technology studies are discussed regarding their relative contributions to anthropological archaeology. Although the texts by Kolb and Lackey (1988) and Bronitsky (1989) are important reading for ceramic specialists, the latter volume is riddled with flaws and contains studies that rarely articulate well to socioeconomic or sociopolitical questions of archaeological relevance.

Volumes Reviewed:

Bronitsky, Gordon, ed. 1989. *Pottery Technology: Ideas and Approaches*. Boulder: Westview Press. 220 pps.

Kolb, Charles C., and Louana M. Lackey, eds., with Muriel Kirkpatrick. 1988. *A Pot for all Reasons: Ceramic Ecology Revisited. Papers dedicated to Frederick R. Matson, 1986*. A Special Publication of *Ceramica de Cultura Maya et al.* Philadelphia: Laboratory of Anthropology, Temple University. 261 pps.

## INTRODUCTION

Two recent contributions to archaeological ceramic-technology research present contrasting views of current studies in that field. The disparate views result from the varying degree to which archaeological questions are integrated into discussions in the two volumes. All of the papers in the Kolb and Lackey (1988) volume are well articulated to culturally relevant questions, whereas few of the articles in the Bronitsky (1989) work are linked to issues beyond the study of ceramic-technological attributes in and of themselves.

Additionally, the volumes contrast because of the obviously varied levels of editorial skills and energies expended in their production. The Bronitsky volume is a loosely strung-together collection of papers that drastically vary in quality and content. The Kolb and Lackey collection, on the other hand, presents consistently well-written papers that closely address current archaeological problems and issues. This may be a case where two (or even three) heads are better than one: Kolb and Lackey, aided by Muriel Kirkpatrick, shared a common vision in assembling their work.

Bronitsky, on the other hand, worked alone with only the consultations of friends and colleagues.

#### POTLATCH: KOLB AND LACKEY (1988)

*A Pot for all Reasons* is a cohesive work because it specifically addresses ceramic ecology, a field of archaeological interpretation catalyzed by the works of Frederick Matson and founded through Matson's historic "Ceramics and Man" symposium held in 1961. Kolb defines ceramic ecology as:

a contextual, analytical approach to ceramics in which the investigator seeks to place physical scientific data into both an ecological and sociocultural (and socioeconomic and sociopolitical, etc.) frame of reference by relating the technological properties of the raw material resources—clays and plastics—to the manufacture, distribution, use, and discard of ceramic products (Kolb and Lackey 1988:xi).

Kolb and Lackey's work is the result of an AAA symposium held in 1986, "A Pot for all Reasons: Ceramic Ecology Revisited." The two sessions of the symposium were dedicated to Frederick R. Matson, and their subsequent publication is another *festschrift* for him.<sup>1</sup> As such, it is the third in a series of publication "potlatches" that have served both to honor Matson and to increase the prestige of the respective volumes' editors.<sup>2</sup> As with the ethnographic "potlatch," each *festschrift* volume exceeds its predecessor; one wonders if this sequence can continue to escalate in quality and relevance to archaeological research.

*A Pot for all Reasons* stands as a celebratory *festschrift* in that all of the papers are united in their debt to Matson's inspiration. It stands as a further tribute to Matson that the editors enforced a strict time-limit for submission of final drafts for publication "rather than let the papers become stale, as has been the case with many delayed *festschrift*" (Kolb and Lackey 1988:xv). Because of this, the papers in *A Pot for all Reasons* are timely and have already made an impact on archaeological interpretation; their consistently high quality promises that they will continue to do so for years to come.

*A Pot for all Reasons* derives additional strength from the broad backgrounds of the participants chosen for the original symposium, coupled with the strict articulation of their work with archaeologically relevant questions. Again, this is a direct (and positive) reflection of the volume editors' skill. Kolb and Lackey (1988:xvi) state that the original participants:

were chosen to reflect the variety of interests in ceramic studies in the hope of fostering a cross-fertilization of ideas and methods. Included were professional potters (Hagstrum, Lackey and Selsor), physical scientists (Myer from geology, Silk from chemistry), a social psychologist (Mossman), ethnographers (Arnold, Hagstrum, Lackey, Mossman and Selsor), and archaeologists (Arnold, Beaudry, Benco, Betancourt, Chase, Deal, Hagstrum, Hopkins, Kolb, Lackey, and Rutter). A number have had additional cross-training and coursework in the physical sciences—especially chemistry, mineralogy, and petrography (Arnold, Benco, Deal, Hopkins, Kolb, and Lackey).

Because the editors have provided a superb, concise summary of the works contained in their volume (see Kolb and Lackey 1988:23-37), I will not detail each contribution here. All papers in the volume address specific archaeological problems through the study of ceramics—most through analyses of ancient materials themselves but frequently with recourse to both ethnoarchaeological studies and experimental-replicative analyses as well. As the editors state, “socioeconomic and ceramic craft production analyses are notable in all of the papers” (Kolb and Lackey 1988:39). These socioeconomic and production analyses are specifically what make these papers relevant to *anthropological* archaeology.

#### POTLUCK: BRONITSKY (1989)

Rather than a “potlatch” of papers celebrating a coherent theme or person, the Bronitsky volume is a “potluck” collection of articles connected only in that they all address ways in which science, particularly materials science, can be applied to the study of archaeological ceramics. In the same way that potluck dinner dishes are usually contributed independently by their cooks, these articles are offered individually to the volume with few evident connections between the works. The contributions represent the distinctly different authors without having been “reheated” or rearranged in any way by the editor, Bronitsky.

Since Bronitsky’s introduction is rather brief, I will elaborate on the key articles in his volume. The book is composed of five parts; it begins with “Ceramic Production: The Potter’s Perspective.” Bronitsky opens with his own contentiously entitled contribution, “A Ceramics Manifesto,” in which he purports that the archaeological study of ceramics should mean more than provenience studies and dating; rather, pots should be viewed as tools. Moreover, Bronitsky ironically states (1989:8) that it will require high-tech specialists to understand “primitive” potters. These are notions with which I think all of the authors in both volumes reviewed, as well as

many other investigators, would concur. Yet, even though many of the articles in *Pottery Technology* deal with aspects other than provenience and dating, they often lack clear or valid articulation with archaeological questions. Thus, even though the articles of *Pottery Technology* are primarily written by archaeologists rather than archaeometrists, they still lack the relevance to archaeology that would make them widely cited. Much of this could, and *should*, have been overcome by the editor during the book's conception and production through communication with the various authors.

Matson, the father of ceramic ecology and clearly the most "prestigious" of Bronitsky's contributors, returns to finish a study of shell-tempered pottery that he began before World War II. In this, he reexamines his work on the temper and technology of Fort Ancient (Ohio) pottery. Back in 1939, Matson states that he was:

concerned primarily with the measurement of the physical and mineralogical properties of ancient pottery. Now, having had the opportunity to observe and talk with potters still working in villages in several parts of the world, I am far more interested in examining sherds for clues relating to man, their maker (Matson, in Bronitsky 1989:19).

Additionally, Matson states:

In reviewing the data accumulated in the study of sherds from Fort Ancient and three clay samples obtained at the site, re-examining some of the sherds and petrographic thin sections, and conducting further tests of the clays, I find that I have much more of an interest in determining what can be learned from sherd studies at the site itself...than in detailed laboratory analyses for this particular kind of pottery (Matson, in Bronitsky 1989:28).

These two quotes are offered almost as apologies or excuses in Matson's paper, which concentrates on physical studies of the Fort Ancient ceramics without much recourse at all to the social context of their production. I infer from Matson's quotes above that he supplied a paper to the volume that he thought would be in keeping with the book's theme, even though it was devoid of culturally relevant insights.

The work by Van As is the best illustrated paper of the volume, and it offers several very useful points for anyone studying the technology of ceramics produced on the potter's wheel. Unfortunately, Van As does not describe how he detects various technical manufacturing processes (slow wheel, fast wheel, etc.), which would have been a very useful contribution to the ceramic technology literature. Instead, he simply reports the findings

of his work on a large, ancient assemblage from the Near East. Van As' work appears to be a demonstration of what Matson now finds a more desirable methodology—working directly from observations of excavated materials rather than from laboratory experiments. Van As does not explicitly state whether he conducted experiments in conjunction with his work at Tell Hadidi.

Van As offers the useful comment that base sherds show all of the technological attributes that can be diagnosed from whole vessels, whereas rim sherds are somewhat useless. In one illustration he shows how various rim shapes were probably produced; such practical illustrations are not common in archaeological literature and are a welcome addition. Van As also discusses the pros and cons of using refiring to characterize clay sources and even notes the anomalous results obtained from this study that may reveal something of the vessel function, a twist that has rarely, if ever, been discussed in reference to refiring studies (Van As, in Bronitsky 1989:48). This article is very useful for any archaeologist studying wheel-made assemblages, both for its technological information and for the points made that may affect archaeological sampling (such as rim sherds "carrying" less technological information than base sherds).

In part two, "Production and Processes," Kaiser and Lucius provide a discussion of Thermal Expansion Measurement (TX) through use of a dilatometer, a tool useful for determining firing temperatures of ceramics. The jargon-laden article frequently assumes prior knowledge of materials-science terminology. Despite this, their discussion is more in-depth than that found in Rice (1987) and so will continue to be useful to those hoping to apply dilatometry to archaeological questions.

Gogte's article, "Simple Methods of Chemical Analysis of Pottery: A Forgotten Art," is a gem in this world now crowded with expensive high-tech analyses. Unfortunately, the concise discussion quickly gets a bit too technical and will probably lose many of its archaeological readers; however, it will be very comprehensible, and useful, to archaeometrists.

The study by Li Hu Hou, on the other hand, is an example of much of what appears to be wrong with the articulation of materials science and archaeology, despite the fact that Bronitsky maintains that his book will create new pathways for this interaction. Moreover, contrary to his "manifesto," this article is concerned entirely with compositional analyses. The study is conducted on a sample of only 14 sherds from at least three different Song Dynasty kilns; little of the historical context of these art-object porcelains is discussed. The only link provided to what may be an archaeologically relevant question, as opposed to an art-historical one, is

the statement that "the study of such objects can provide information about the palace economy" (1989:123). As Kolb also points out in a review of this volume, the formula that is key to Hou's analyses "is illegible and requires further elaboration" (1990:574).

Part three, "Ceramic Technology and Socioeconomic Systems," contains a single article by Terry Child. This piece examines the interface between ceramic studies and metallurgy—brick furnaces and clay blow-pipes (tuyeres) used in early Iron Age iron smelting in Tanzania. Using multiple lines of inference (ethnoarchaeology, replication, petrography, electron-probe microscopy, and experimental firings), Child forges a fascinating path for future technological study of both metallurgy and ceramics. Interestingly, Child is the sole female contributor to this volume on ceramics;<sup>3</sup> this imbalance is either a reflection of gender-biased "networks," in which males may tend to associate and consult other males (see Wylie 1991) or else demonstrates that *technological* studies of ceramics based in the "hard" sciences are primarily the realm of male, rather than female, analysts.

Kenneth Reid's paper, the sole contribution to "Part Four: Ceramic Analysis and the Study of Formation Processes," is a study of pottery performance and preservation properties. He uses materials science to assess the differential preservation and function of "subceramic meatpots" found among 12 northwestern North American tribes; he concludes that they functioned as a type of "primitive thermos."

Three papers comprise the final section, "Part Five: The Archaeologist and Archaeometrician: Larger Questions." Schiffer begins with a well-organized and logical proposal for a study of Grasshopper Ruin (Arizona) pottery use-wear. In typical Schifferian manner, he proposes a nomothetic paradigm in which principles and techniques of use-wear can be studied as correlates of ceramic techno-functions. To my knowledge, no one has yet actually carried out this study, although principles of these use-wear studies have been delineated in two recent ceramic ethnoarchaeology dissertations based on the Kalinga Ethnoarchaeological Project (Skibo 1992).<sup>4</sup>

Fred Plog and Steadman Upham attempt to review the relationship between archaeometry and archaeological inference. Although potentially useful, this contribution elaborates examples that seem very rare and somewhat illogical. I doubt that other investigators would have mistaken the bedrock material native to the site as evidence of possible metal smelting were it not for an almost monomaniacal desire to prove that the site, *Nuvakwewtaqa* (Chavez Pass, Arizona), provided indisputable evidence for social complexity in the prehistoric southwest United States (see Upham

1982). To use this as an example of how archaeometric data can lead archaeologists "astray" is presumptuous; rather, it serves as an example of how archaeologists sometimes ignore counter-evidence beneath their feet when it will not help support their position in an ongoing argument (see Cordell et al. 1987; Reid et al. 1989). Nonetheless, the take-home message of this piece—to use caution in drawing conclusions based on archaeometric studies—is valid.

Gary Feinman provides the conclusion to this volume and does so in a short, but trenchant, essay. He calls for sensible cooperation and communication between archaeologists and the specialists they consult. Though brief and essentially theoretical, this is perhaps the most significant contribution to the volume and is worthwhile reading for anyone concerned with questions of ceramic archaeology and pottery technology.

Like *A Pot for all Reasons*, Bronitsky's book is also the result of a conference symposium; however, *unlike* the Kolb and Lackey collection, the details of the symposium are not described anywhere by Bronitsky. Only after reading Kolb's review of the book were the details of the work's publication made clear:

Bronitsky organized a 10-paper symposium, "New Approaches to Ceramic Technology" (American Anthropological Association Annual Meeting 1982), with Prudence Rice and Gary Feinman as discussants. This book only partly reflects the results of that symposium, since only three original presentations are retained. The remaining seven papers and four solicited post-symposium contributions were withdrawn or were published elsewhere. The volume was both delayed and reduced in size (Kolb 1990:573).

Once these facts are known, the editorial inconsistencies in the volume are perhaps better understood. Bronitsky's introduction is very brief and does not adequately summarize the miscellaneous papers in the volume; in it, he references works by authors Stoltman and Johnston that are no longer included in the volume as published. Apparently, the introduction was written and left unrevised throughout the long delay in publication. In addition, many of the papers were not "up-to-date" at publication; as Kolb (1990:573) points out, "only about 10 percent of all references are later than 1985, and only one author cites the standard compendium, Rice's *Pottery Analysis: A Sourcebook* (1987)."

Several other points throughout the book indicate weak editing or even lack of a technical editor. For example, Matson refers to a "Fig. 3.3" that does not appear in the book (in Bronitsky 1989:23); on page 26, he states that "three pieces were in the 20 percent range," yet, in the preceding

sentence, there are clearly four sherds listed in the 20 percent range. Wallace (1989:33) requests that his paper not be quoted without permission of the author; this peculiar point probably resulted from the inclusion of an unrevised conference-paper acknowledgement, given that published works rarely carry such restrictions.

Furthermore, little respect for the now commonly accepted use of gender in professional writing is exhibited (American Anthropological Association 1974):<sup>5</sup>

I am far more interested in examining sherds for clues relating to *man*, their maker, than in defining the properties of the clays which they selected and at times tempered (Matson in Bronitsky 1989:19; emphasis mine).

Later, inconsistently, Matson writes:

The potter at Fort Ancient had several textural variations in the clay resources available to *her*.<sup>6</sup> *She* used a good quality clay when tempering it with shell, and *she* could produce good thin-walled vessels in part because of the chemical nature of the powdered shell (Matson in Bronitsky 1989:28-29; emphasis mine).

It is likely that Bronitsky shied away from editing Matson's work too closely because of Matson's obvious seniority. Nonetheless, similar problems are "peppered" throughout the rest of the book, so great care should be taken when citing data or text from this work.

As Kolb (1990: 574) points out, "Rice's *Pottery Analysis* (1987) and Arnold's *Ceramic Theory and Cultural Process* (1985) supersede most of the technical and interpretive methodologies [of the Bronitsky book], so that the volume is *not* the 'impressive array of studies' (p. 2) Bronitsky claims." However, even though it was dated and flawed even at the time of its publication, several of the articles in *Pottery Technology* contain useful points, as mentioned above. Despite its flaws, the Bronitsky volume should be consulted by anyone working on ceramic archaeology and pottery technology.

#### CONCLUSION

Like either a potluck dinner or a potlatch feast, these volumes present a tantalizing, though sometimes inconsistent, variety of works. One could not derive "daily sustenance" from the papers in either volume; they are not "meat and potatoes" monographs laden with useful raw data. Several of the articles in *A Pot for all Reasons* are frequently cited (especially that by Benco

in the literature on craft specialization). This volume is more valuable than the Bronitsky work because its studies are firmly rooted in anthropology and, thus, archaeology. One never loses sight of the *makers* and *users* of pottery when reading *A Pot for all Reasons*; this important message should inspire all future research conducted on archaeological ceramic technology. Such continued inspiration will be the ultimate *festschrift* given to Matson.

#### NOTES

<sup>1</sup>*Festschrift* is defined as "a volume of articles, essays, etc., contributed by many authors in honor of a colleague, usually published on the occasion of retirement, an important anniversary, or the like" (Stein 1979:525).

<sup>2</sup>The first and official *festschrift* was presented to Matson upon his retirement from Penn State in 1978; it was later published as *Pots and Potters*, edited by Prudence Rice (1984), which was "intended as an outgrowth and updating of *Ceramics and Man*, with a primarily anthropological emphasis" (Rice 1984:xiii). In 1984, the publication of another volume celebrated the life-long contributions of Matson: *The Many Dimensions of Pottery: Ceramics in Archaeology and Anthropology* edited by Sanders Van der Leeuw and Alison C. Pritchard. The Van der Leeuw and Pritchard volume, which was the result of a "follow-up" to the "Ceramics and Man" conference held in Holland in 1982, was an "attempt to elicit an *assessment* rather than an elaboration" of ceramic ecology (van der Leeuw and Pritchard 1984:4).

<sup>3</sup>Ceramic analysis is a field generally dominated by female analysts. Gero (1983, 1985) has noted that male archaeologists usually "hunt down the data" through field recovery whereas female researchers are most frequently funded to "cook it up" in post-excavation analyses.

<sup>4</sup>Masashi Kobayashi is currently working on the other Kalinga-based ceramic use-wear dissertation.

<sup>5</sup>The AAA stated in 1974 that the use of the generic masculine is "conceptually confusing." Further work has demonstrated the flaws in androcentric prescriptive grammar (Martyna 1978, 1983) and that context is *not* an adequate arbiter of the specific vs. generic meaning of the pronoun "he" or the noun "man" (MacKay 1983:45-47). Bodine (1975) has also demonstrated that, contrary to popular misconceptions, the use of "they" as a singular, gender-free English pronoun was common until relatively recently. Thus, its use is not necessarily "grammatically incorrect."

<sup>6</sup>Undoubtedly, Matson's tacit declaration that Fort Ancient pottery was manufactured by women was drawn from ethnographic analogy based on cross-cultural analyses of the division of labor in modern societies (see Murdoch and Provost 1973). Discussion of the merits and pitfalls of cross-cultural analyses are beyond the scope of this review, but see Rice (1991) or Senior (1992) for some commentary on the gender of prehistoric potters.

#### REFERENCES

- American Anthropological Association. 1974. *Newsletter* January.  
 Arnold, Dean E. 1985. *Ceramic Theory and Cultural Process*. Cambridge: Cambridge University Press.

- Bodine, Ann. 1975. Androcentrism in Prescriptive Grammar. *Language in Society* 4:129-146.
- Bronitsky, Gordon, ed. 1989. *Pottery Technology: Ideas and Approaches*. Boulder: Westview Press.
- Cordell, Linda S., Steadman Upham, and Sharon Brock. 1987. Obscuring Cultural Patterns in the Archaeological Record: A Discussion from Southwestern Archaeology. *American Antiquity* 52:565-577.
- Gero, Joan. 1983. Gender Bias in Archaeology: A Cross-Cultural Perspective. In *The Socio-politics of Archaeology. Research Report Number 233*. J. Gero, D. Lacy, and M. Blackey, eds. Pp. 59-65. Amherst: Department of Anthropology, University of Massachusetts.
- Gero, Joan. 1985. Socio-politics and the Woman-at-home Ideology. *American Antiquity* 50(2):342-350.
- Kolb, Charles C., and Louana M. Lackey, eds., with Muriel Kirkpatrick. 1988. *A Pot for all Reasons: Ceramic Ecology Revisited. Papers dedicated to Frederick R. Matson, 1986*. A Special Publication of *Ceramica de Cultura Maya et al.* Philadelphia: Laboratory of Anthropology, Temple University.
- Kolb, Charles C. 1990. Review of *Pottery Technology: Ideas and Approaches*. *American Scientist* 78:572-574.
- MacKay, Donald G. 1983. Prescriptive Grammar and the Pronoun Problem. In *Language, Gender and Society*. B. Thorne, C. Kramarae, and N. Henley, eds. Pp. 38-53. Rowley, Mass.: Newbury House Publications.
- Martyna, Wendy. 1978. What does "He" Mean? Use of the Generic Masculine. *Journal of Communication* 28(1):131-138.
- Martyna, Wendy. 1983. Beyond the He/Man Approach: The Case for Nonsexist Language. In *Language, Gender and Society*. B. Thorne, C. Kramarae, and N. Henley, eds. Pp. 25-37. Rowley, Mass.: Newbury House Publications.
- Murdoch, G.P., and C. Provost. 1973. Factors in the Division of Labor by Sex: A Cross-cultural Analysis. *Ethnology* 12:203-225.
- Reid, J. Jefferson, Michael B. Schiffer, Stephanie Whittlesey, Madeline Hinkes, Alan Sullivan, III, Christian Downum, William Longacre, and H. David Tuggle. 1989. Perception and Interpretation in Contemporary Southwestern Archaeology: Comments on Cordell, Upham, and Brock. *American Antiquity* 54: 802-814.
- Rice, Prudence. 1984. *Pots and Potters: Current Approaches in Ceramic Archaeology*. UCLA Institute of Archaeology Monograph 24. Los Angeles: University of California Press.
- Rice, Prudence. 1987. *Pottery Analysis: A Sourcebook*. Chicago: University of Chicago Press.
- Rice, Prudence. 1991. Women and Prehistoric Pottery Production. In *The Archaeology of Gender: Proceedings of the 22nd Annual Chacmool Conference*. D. Walde and N. Willows, eds. Pp. 436-443. Calgary: The Archaeological Association of the University of Calgary.
- Senior, Louise M. 1992. Gender and Craft Innovation. Paper presented at the Annual Meeting of the American Anthropological Association (AAA), San Francisco.
- Skibo, James. 1992. *Pottery Function: A Use Alteration Perspective*. New York: Plenum Publishing.
- Stein, Jess, ed. 1979. *The Random House Dictionary of the English Language*. New York: Random House.
- Upham, Steadman. 1982. *Politics and Power: An Economic and Political History of the Western Pueblo*. New York: Academic Press.

- Van der Leeuw, Sanders, and Anne Pritchard, eds. 1984. *The Many Dimensions of Pottery: Ceramics in Archaeology and Anthropology*. CINGULA 7. Amsterdam: Institute for Pre- and Proto-history, University of Amsterdam.
- Wylie, Alison. 1991. Diagnosing the Chilly Climate for Women in Colleges and Universities. Paper presented to the Canadian Anthropological Association (CASCA), 1991 Annual Meeting. London, Ontario.

