The history of “laundry lists” in North American zooarchaeology

R. Lee Lyman

Department of Anthropology, University of Missouri, Columbia, MO 65211, United States

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ABSTRACT

North American zooarchaeologists regularly state that prior to about 1970, most zooarchaeological reports were made up of lists of the animal taxa identified, sometimes with taxonomic abundance data. These reports are typically labeled laundry lists or species lists, terms meant to be pejorative. Some reports that appeared between 1900 and 1979 were guides to taxonomic identification, others discuss analytical techniques, and some represent thoughtful analyses. A sample of 286 titles authored by zooarchaeologists that appeared between 1900 and 1979 shows that laundry lists made up 55 percent of the titles published between 1900 and 1959; 20 percent of the titles that appeared between 1960 and 1979 are laundry lists. Adding titles authored by zoologists increases the relative frequency of laundry lists to 68 percent between 1900 and 1959, and to 24 percent between 1960 and 1979. Ironically, the originator of the term laundry list and its derogatory implications (Stanley J. Olsen) produced only laundry lists after he introduced the concept. Laundry lists are part of the legacy of North American zooarchaeology, but previous characterizations of disciplinary history have not been based on empirical data and have been inaccurate. The data in laundry lists is today analytically valuable.

1. Introduction

Studying the history of archaeology has become an important undertaking over the past several decades and as a result we today know much about our discipline’s past. Yet there are still unexplored chapters in that history, and some aspects of disciplinary history are accepted as fact despite a lack of substantiating empirical evidence. The history of any science should be founded on empirical data to ensure accuracy (Kuhn, 1968; Laudan et al., 1986). In this paper, I examine a particular claim about the history of North American zooarchaeology. I do so to illustrate the point that we risk inaccurate conceptions of the past if we do not study evidence of that past, a point that is, ironically, the essence of archaeology. Despite deep theoretical differences, our intellectual predecessors were not ignorant; they often had research goals and explanatory models in mind. We are the intellectual descendants of those individuals. Knowing our discipline’s history provides understanding of the research paradigm under which an early project was undertaken and this in turn provides insight to why materials and data were collected (or not) in particular ways. Inaccurate historical knowledge may result in past research being ignored because it is thought to have produced incorrect information and materials that are of no modern analytical value.

North American zooarchaeologists have often stated that prior to the 1970s, most faunal analyses involved construction of a list of species identified in a collection, sometimes with taxonomic frequency data. Those early analyses are labeled “laundry lists” or “species lists.” No data have been presented to justify this standard characterization of pre-1970s zooarchaeology. In this paper I explore the notion of zooarchaeological laundry lists. Review of the North American zooarchaeology literature that appeared between 1900 and 1979 shows that indeed, some reports that appeared prior to 1970 comprise a laundry list and little else. However, that literature also indicates that well prior to 1970 North American zooarchaeological studies produced more than just laundry lists. Ironically, the originator of the term laundry list and its derogatory implications himself produced only laundry lists after he introduced the concept.

I first identify the origin of the concept of zooarchaeological laundry lists and determine what the concept means and who first proposed the term. Then, I phrase the received wisdom about the history of zooarchaeology research as an hypothesis. The kinds of data and analyses necessary to test the hypothesis are then described. Analytical results suggest the hypothesis cannot be sustained. Reasons why laundry lists were produced are evaluated, and the role of zoologists in the production of laundry lists is found to be important.

2. Origin of the laundry list concept

Many authors who have used the terms “laundry list” and synonyms such as “species list” and “list of species” (Table 1) do not
indicate precisely what the terms signify. (Henceforth, I use the term “laundry list” as shorthand for these and related terms.) Some authors who used the term did so in their Master’s thesis or doctoral dissertation, likely because such use implied the author knew something about the history of the research field to which he or she was contributing. Further, the 1970s witnessed major growth in the production of zooarchaeological reports and some of those who contributed to that growth likely hoped to demonstrate they were intellectually advanced relative to their predecessors.

Statements describing pre-1970s North American zooarchaeology and using the term range from implying a laundry list categorization indicates a lack of analytical sophistication (e.g., Glassow and Joslin, 2012; Jones, 2010), through being critical of such lists (e.g., Reitz and Wing, 1999, 2008; Robison, 1978), to being derogatory about the analytical value of such lists (Medlock, 1975b; Smith, 1976). Precisely what a laundry list is, however, is seldom discussed.

Smith (1976:279) characterized a zooarchaeological laundry list as consisting “of a list of species represented, including the number of skeletal elements per species and perhaps minimum number of individual counts and corresponding project meat yield values. The brief text that accompanies such lists does little more than describe what is shown in the species list.” Continuing, Smith (1976:283) noted that “the primary research goal of faunal analysis [has been] the identification of each individual skeletal element as to species, body part, side, and so on, and the presentation of this information in the final report. Such reports are almost entirely descriptive in nature. Any attempts at interpretation or explanation of the presented data are brief, to say the least.” (Smith (1975) does not use the term, but characterizes early zooarchaeology using similar wording.) The preferred alternative, in Smith’s (1976:284) view, is the “ecological approach.”

What, then, might the ecological approach comprise?

Smith (1976:284) stated that the “primary research goal of the ecological approach in faunal analysis is to explain, in the form of predictive models, the interface that existed between prehistoric human populations and the faunal section of the biotic community.” He presented five questions that he argued should serve as guides toward identifying and understanding the interactions between prehistoric people and their animal prey.

- What was the relative dietary importance of exploited animal taxa?
- Was exploitation of an animal taxon seasonally restricted or did it take place year-round?
- What procurement strategies were used to exploit animals?
- To what degree was exploitation of taxa selective?
- What was the seasonal pattern and strategy of human exploitation of animals?

Smith (1976) borrowed the term laundry list from Stanley Olsen. Olsen (1971:1) reported that until the late 1960s, “it was common practice to place a faunal list at the end of an archaeologically site report. Such reports were rarely more than one or two pages long and were in reality ‘laundry lists,’ tabulating a specific number of animals as being present on the site.” And by saying that “interpretation, rather than identification, should be stressed as the final goal of bone examinations,” and that laundry lists were the result of “no thought of interpretation as to what those remains really meant in the overall evaluation of the excavations,” Olsen (1971:1) established that the “laundry list” term was a derogatory one.

No one used the term laundry list or the similar species list in their writings prior to Olsen’s (1971) publication. Entering either “zooarchaeological laundry list” or “zooarchaeological species list” in the web-based Google search engine produces titles in North American zooarchaeology ranging from the 1970s to 2014 (Table 1). But the concept of a laundry list was present prior to 1970, Daly (1969:146) noted that until about 1960, most archaeologists in both the Old and the New Worlds, “were often content to merely publish a list of species present.” A few years earlier and considering only the New World, Ziegler (1965:51–52) surmised that “all too often [zooarchaeologists] have unknowingly held back a large amount of usable information by presenting in the finished [site] report only a simple listing of the animals present, without reference to such very relevant factors as numbers of bones per species, depth of occurrence, degree of maturity, condition of the remains, and so on.” The common theme throughout the pertinent literature (Table 1) is that laundry lists are of little analytical value.

### Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Laundry list</th>
<th>Species list</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>Olsen</td>
<td>Feldman</td>
</tr>
<tr>
<td>1972</td>
<td>Kasper</td>
<td>Pennman</td>
</tr>
<tr>
<td>1973</td>
<td>Medlock (X2)</td>
<td>Berwick</td>
</tr>
<tr>
<td>1975</td>
<td>Smith</td>
<td></td>
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<tr>
<td>1976</td>
<td></td>
<td></td>
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<tr>
<td>1977</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>McCormick</td>
<td></td>
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<tr>
<td>1983</td>
<td>Olson</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>Parmalee</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>Lyman</td>
<td></td>
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<tr>
<td>1987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>McMillan</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>Murray</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>Reitz</td>
<td></td>
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<tr>
<td>1994</td>
<td>Darwent; Stewart</td>
<td></td>
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<tr>
<td>1995</td>
<td></td>
<td></td>
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<tr>
<td>1997</td>
<td>Walker</td>
<td></td>
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<tr>
<td>1999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>Chapin-Pyritz</td>
<td></td>
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<tr>
<td>2003</td>
<td>Lee</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>Emery</td>
</tr>
<tr>
<td>2005</td>
<td>Lawson; Smith-Lintner</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Orr</td>
<td>MacKinnon</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td>Reitz and Wing</td>
</tr>
<tr>
<td>2009</td>
<td>Kavountz</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Jones; Powell</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td>Peres</td>
</tr>
<tr>
<td>2014</td>
<td>Peres</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>25 times (after Olsen, 1971)</td>
<td>17 times</td>
</tr>
</tbody>
</table>

4 First and second editions.

b Robison uses the term “grocery list” rather than “species list.”

3. What is a laundry list?

In Smith’s (1976) view, anything short of producing answers to the five questions in the human ecological approach comprises a laundry list type of zooarchaeological report. This makes it difficult to falsify a hypothesis that the majority of pre-1970 zooarchaeological reports are laundry lists. Some reports that would be categorized as laundry lists under Smith’s (1976) criteria would, however, be considered human ecological studies under Olsen’s (1971) criteria. Further, Smith (1976) and Reitz and Wing (1999) agree that laundry lists result from lack of interest in human ecology, but they differ on what precisely makes up a laundry list other than a list of identified taxa and perhaps (but not necessarily) taxonomic abundance data in one or more forms. For my purposes, clarification of the concept of a laundry list is necessary.

Published histories of zooarchaeology in other areas indicate the concept of laundry lists is largely limited to North America (e.g., Allen and Nagaoka, 2004; Bartosiewicz and Choyke, 2002; Coggrove, 2002; Darwent, 1994; Driver, 1993; Horwitz, 2002; Lin,
The hypothesis to be tested is: North American zooarchaeological reports published prior to 1970 mostly comprise laundry lists. The date of 1970 is approximate, so to insure adequate temporal coverage, I consider North American literature that appeared between 1900 and 1979 (see below). Those who have stated that laundry lists were common prior to 1970 have not characterized the interaction of humans with animals. Thus diet, ritual use of animal parts, manufacture of tools from animal parts, seasonality of resource exploitation, habitats exploited, selective hunting, prey mortality, differential transport of carcass (skeletal) parts, butchering practices, domestication, and animal burials are included. Interpretations of faunal remains as indicative of past ecological conditions or prehistoric environments—research pursued by many zoologists who served as the first zooarchaeologists—should also be included as representing more than laundry lists. In short, if a zooarchaeological report does not represent anthropological zooarchaeology, then it is a laundry list.

5. Materials and methods

By “North American zooarchaeology” I mean the faunal remains used by anthropologists in North America (Panama north to Alaska and Newfoundland), including much of the Caribbean. In virtually all cases, authors published in journals with a North American focus and were trained in North America. Journal articles, book chapters, monographs, theses and dissertations were included. Titles focusing on faunal remains from continents other than North America were excluded. I did not include zooarchaeological appendices from unpublished site reports, of which there are countless instances, particularly in the 1950s and later. Some references included in the literature examined represent zooarchaeological appendices included in published site reports (e.g., Adams, 1956; Enbysk, 1956; Lawrence, 1944; White, 1954). I did not examine the hundreds of published site reports to determine if they included zooarchaeological appendices; those data might overturn conclusions drawn here. I did not record published site reports that included a zooarchaeological chapter, section, or appendix authored by the lead archaeologist (e.g., Mills, 1906; Stanford, 1976) for similar reasons. I here refer to the list of zooarchaeology titles as the 1900–1979 bibliography.

Although it is likely that some titles are not in the 1900–1979 bibliography, I assume that the known sample \((N = 1028 \text{ titles})\) is sufficiently robust that general trends will be apparent. As might be predicted, the number of titles per five-year bin increases over the eight decades represented, with a not unexpected decrease during World War II (Fig. 1). The frequency trend is at least partially the result of concomitant increases in the numbers of college students, the numbers of practicing archaeologists, and the increasing tempo of cultural resource management (e.g., Schiffer, 1979).

Many titles in the 1900–1979 bibliography concern analytical methods rather than analyses of collections; these reports are

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**Fig. 1.** Frequency of titles in North American zooarchaeology per five-year bin from 1900 to 1979.
not included in my analyses. In some cases samples of faunal remains were so small that analyses beyond production of a species list or laundry list would even today not be undertaken; in these cases the number of identified bones and teeth often numbered a few dozen or less. These titles were included in my analysis so as to not bias results toward falsifying the hypothesis. Finally, many early reports are authored by zoologists; these, with some notable exceptions (e.g., Howard, 1929; Lyon, 1937), represent laundry lists (e.g., Baker, 1941; Burt, 1961; Eyerdam, 1936; Harris, 1968). This is not unexpected given that zoologists were seldom interested in or knew relevant archaeological questions. I kept track of these types of reports but do not include them in initial analyses, with the notable exceptions of the significant zooarchaeological publications by zoologists John E. Guilday, Stanley J. Olsen, Paul W. Parmalee, Theodore E. White, and Elizabeth S. Wing.

I tallied the number of titles that minimally include a list of species identified in a collection and the year when each title appeared. I noted titles that were laundry lists, and those that discussed some aspect of human ecology. Because the number of titles examined increased with decreasing age, I determined the percentage of titles per 10 year or 5 year temporal bin that were laundry lists. I assume the sample of titles (N = 286) authored by zooarchaeologists is representative given that it displays the trend of decreasing frequency of titles with increasing age shown by the total zooarchaeological literature (Fig. 1).

6. Results

Prior to 1970 many reports were in fact laundry lists (Fig. 2). Between 1900 and 1959, 55 percent of the titles that appeared represent laundry lists. This is a majority, but not a large one. Fifty-five percent is lower than expected given the tone of the literature (Table 1) which implies >80 percent of the titles should be laundry lists. In addition, the major change in proportion of titles that represent laundry lists occurs at about 1960 rather than about 1970. Together, these two observations suggest the original hypothesis cannot be maintained in its original form.

In the 1960s and 1970s, about 20 percent of all titles per decade represent laundry lists. These lists did not disappear completely during those two decades, contrary to what is implied by the literature (Table 1). Thus the secondary hypothesis that nearly all titles appearing after 1970 (actually, 1960) were not laundry lists cannot be sustained.

Recall that no zooarchaeological analyses prepared by zoologists (with the exceptions of Guilday, Olsen, Parmalee, White, and Wing) are included among the data. Thus many reports authored by Frank C. Baker (malacologist) in the 1930s and 1940s, W. I. Follett (ichthyologist) in the 1950s and 1960s, Herbert Friedmann (ornithologist) in the 1930s through 1950s, Max R. Matteson (malacologist) in the 1950s, Gerrit S. Miller, Jr. (mammalogist) in the 1910s and 1920s, Loye H. Miller (ornithologist) in the 1950s and 1960s, and Alexander Wetmore (ornithologist) between 1918 and 1945 are not included. Many of these reports, particularly those on mollusks, birds, and fish, comprise laundry lists, likely because the species present in an area were what was of interest to these zoologists. At that time biologists in general were learning which species of plants and animals occurred in particular regions (e.g., Bailey, 1931; Dalquest, 1948; Hall, 1953); zooarchaeological data provided some insight to that topic. For example, Friedmann (1934:84) stated that he was “attempting to analyze the [avian zooarchaeological] data from the viewpoint of ornithology, rather than ethnology or anthropology,” and that the “bones that were perfect enough to be useful as specimens, or that were of particular interest as [zoological] records, have been saved and incorporated into the skeletal collections of the U.S. National Museum” (Friedmann, 1937:431).

The zooarchaeological titles written by zoologists and paleontologists that appeared between 1900 and 1979 (N = 74) represent mostly laundry lists (N = 52, or 70.3 percent). Adding these to the reports authored by zooarchaeologists does not change the trend over time shown in Fig. 2; that trend still indicates a major drop in the frequency of laundry lists and increase in analyses after 1960. However, adding these titles to the analysis also enhances the appearance that the pre-1960 literature comprised mostly laundry lists. Between 1900 and 1959, 68.2 percent of all titles that appeared, regardless of author, represent laundry/species lists (versus 55 percent when only zooarchaeologist-authored titles are included); between 1960 and 1979, 24.0 percent of the titles represent laundry lists (versus 20 percent). In other words, a portion of the responsibility of producing laundry lists must be attributed to zoologists.

Between 1900 and 1944 zoologists authored 73.8 percent (31 of 42) of the titles included in Fig. 2. Between 1945 and 1959, zoologists authored 32.6 percent (14 of 43) of the titles, and between 1960 and 1979 they authored 10.5 percent (29 of 275 titles). This decrease in the contribution of zoologists reflects the professionalization of zooarchaeology—training archaeologists to study animal remains. Interestingly, zoologists seem to have picked up on pertinent archaeological questions after World War II. Of the titles authored by zoologists in Fig. 2, between 1900 and 1944, 93.5 percent (29 of 31) of the titles comprise laundry lists; between 1945 and 1959, 50 percent (7 of 14 titles) comprise laundry lists; and between 1960 and 1979, 55 percent (16 of 29) are laundry lists. Although beyond the scope of the present analysis, it may repay the effort to examine correspondence between the zoologists who authored these titles and the archaeologists who provided them with collections of faunal remains. For example, perhaps the increased pace of construction and land modification after World War II was a catalyst for greater communication between archaeologists and zoologists. Theodore White, who was hired as
the first (and only) River Basin Surveys paleontologist and first published on zooarchaeology in 1952, addressed anthropological zooarchaeological topics in part because of his close interaction with RBS archaeologists (Lyman, 2016).

Research topics covered by the pre-1970 titles represented in Fig. 2 include studies of procurement techniques, butchering practices, diet, changes in diet over time and variation across space, cooking practices, prey demography, seasonality, selective hunting, foraging area or habitats exploited, use of bone as raw material for tools, purposeful burial of animal carcasses, and paleoecology. Butchering and seasonality are particularly prominent topics. Some early studies involved innovative analytical techniques (e.g., White, 1952, 1953), the use of biological measures of community structure (Wing, 1963), or unique techniques for summarizing data (Fowler and Parmalee, 1959; Wing et al., 1968).

On one hand, the data (Fig. 2) indicate we should no longer boldly endorse the hypothesis that the majority (>50 percent) of North American zooarchaeological analyses prior to 1970 were laundry lists. In fact, only 38 of the 122 titles authored by zooarchaeologists and that appeared prior to 1969, or 31.1 percent, represent laundry lists. Further, of the 40 titles by zooarchaeologists that appeared between 1900 and 1959, 22 (or 55 percent) represent laundry lists. So the hypothesis should be rephrased as indicating that prior to 1960, a weak majority of North American zooarchaeological reports were laundry lists. But even that is a poor characterization of the past for two reasons. First, including the titles authored by zoologists who were interested in zooarchaeological topics and had little knowledge of archaeological interests results in an incomplete history at best and inaccurate history at worst and a skewed perception of the early work of zooarchaeologists. Second, as noted above, some analyses that appeared between 1900 and 1959 were innovative.

### 7. Discussion

#### 7.1. Why did laundry lists appear?

The first generation of North American zooarchaeologists, by which I mean those who did zooarchaeological research and published in the 1950s and 1960s (e.g., John E. Guilday, Barbara Lawrence, Stanley J. Olsen, Paul W. Parmalee, Theodore E. White, Elizabeth S. Wing), were without exception trained or worked as zoologists or paleontologists, not as anthropologists (e.g., White, 1935; Wing, 1962; see also Dawson, 1984; Marrinan, 1999; McMillan, 1991; Meadow, 1997). Thus not surprisingly, they often (but not always) did not work toward answering questions of interest to anthropological archaeologists because they had minimal notion of what those questions were other than perhaps the composition of human diet, something White (1953), Lawrence (1957), Olsen (1959), and Wing (1963) recognized. The closest other zoologists got to archaeological topics was when they considered the paleoecological implications of a zooarchaeological collection (e.g., Gustafson, 1968; Harris, 1963), though there were occasional exceptions when a zoologist made a significant anthropological interpretation (e.g., Elder, 1965; Lyon, 1937).

Medlock (1975a:223) attributed laundry lists to archaeologists’ focus on “cultural chronology and amassing huge collections of points and sherds, [plus the assumption] that faunal remains had little to contribute.” Brewer (1992) and Robison (1978, 1987) agree. Olsen (1971:2), on the other hand, suggested laundry lists were produced because the identification of faunal remains was often done by a zoologist “to the detriment of his own research” and thus “only a bare minimum of time is expended and the result is the ‘laundry list’ type of report” (see also Olsen, 1959). Some zooarchaeologists agree with Olsen (e.g., Bonnichsen and Sanger, 1977; Lawrence, 1957; Meadow, 1978; Smith, 1976). Parmalee (1985:62), for example, suggested that when provided with a collection of faunal remains and little contextual information, a species list was to be expected from a zoologist who had little training as an archaeologist.

Some early archaeologists (e.g., Wintemberg, 1919) and some zoologists (e.g., Gilmore, 1949) were well aware of the biological value of zooarchaeological remains. That such remains could also reveal much about human behaviors was also apparent early on to at least some zoologists who studied zooarchaeological material (e.g., Howard, 1929; Lyon, 1937; White, 1952). My impression, and that is all that it is, is that North American archaeologists, first, had little clear conception of the analytical potential of zooarchaeological remains (see for example Meighan et al.’s (1958) very basic statement about such potential) and, second, they had little interest in zooarchaeological remains because their goal was to map the spatio-temporal distributions of prehistoric cultural traits manifest as artifact types in order to write culture histories (Lyman et al., 1997). Thus I think there are several reasons why laundry lists occur in the literature.

#### 7.2. The development of zooarchaeological technique

Prior to the 1970s analytical methods for answering anthropological zooarchaeology questions were poorly developed, provided coarse resolution and were largely based on common sense. The first textbook on zooarchaeology (Cornwall, 1956) devoted only 10 of 245 pages to analysis and interpretation of faunal remains; the other pages focused on skeletal anatomy, taxonomic identification, and determination of age and sex of the individual animal represented by a particular bone. The second zooarchaeological textbook (Chaplin, 1971) devoted 100 of 159 pages to analysis and interpretation. Five textbooks on zooarchaeology were published in the 1970s and four in the 1980s (Casteel, 1976; Chaplin, 1971; Davis, 1987; Evans, 1972; Gilbert, 1973; Grayson, 1984; Hesse and Wapnish, 1985; Klein and Cruz-Urriol, 1984; Smith, 1979). Several of these skim briefly over taxonomic identification and focus on analytical techniques, indicating that by the 1970s, the topics zooarchaeologists thought important to discuss had changed.

The 1970s also produced the first generation of zooarchaeologists trained as archaeologists who studied archaeological faunal remains (e.g., Casteel, 1972; Cumba, 1975; Duffield, 1970; Grayson, 1973; Hill, 1975; Johnson, 1976; Lippold, 1971; Monks, 1977; Pohl, 1976; Reitz, 1979; Smith, 1973; Styles, 1978; Yesner, 1977). Zoologists continued to study zooarchaeological material into the 1970s (e.g., Gustafson, 1972; Holbrook, 1975), but their numbers were dwindling. Further, the popularity of the culture history approach had faded (Lyman et al., 1997) and interests shifted to making archaeology both more anthropological—concerned with human behaviors and the operation of past human cultures—and more scientific, that is, more law generating and less particularistic (Binford, 1962; Caldwell, 1959; Meggers, 1955). Facilitating this shift was the increasing popularity of Julian Steward’s (1955) ecological approach to anthropology (e.g., Rhode, 1999), an approach to which zooarchaeology could make significant contributions (e.g., Meighan et al., 1958; Ziegler, 1965).

#### 7.3. The irony of Stanley Olsen

Ironically, the originator of the laundry list term and its negative connotation, Stanley Olsen, produced laundry lists for nearly a decade after he coined the term (e.g., Olsen, 1974, 1976, 1978; Olsen and Wilson, 1974, 1976, 1978). I am unaware of a zooarchaeological study Olsen produced that might be considered human ecology, beyond the presumption that the bones
identified represented human food waste. I suspect Olsen described early zooarchaeological research as producing laundry lists yet continued to produce just such reports himself for two reasons. First, at the time (late 1960s) North American archaeology was undergoing a shift to the new analytical goals of processual archaeology (e.g., O’Brien et al., 2005; Reid and Whittlesey, 2005). The preceding (allegedly) descriptive culture history approach was being derogated by many who sought to do a more anthropological kind of archaeology (e.g., Binford, 1968; Deetz, 1970; Leone, 1972; Longacre, 1970; Watson et al., 1971). Olsen likely joined the rhetoric to show he was on the then current bandwagon.

The second likely reason Olsen produced laundry lists resides in his academic background (following details from: en.wikipedia.org/wiki/Stanley_John_Olsen). His formal education consisted of a high-school diploma. After service in World War II, he worked in Alfred Sherwood Romer’s vertebrate paleontology lab until 1956 when he became State Vertebrate Paleontologist with the Florida Geological Survey. In 1968 he joined Florida State University’s Department of Anthropology and built a zooarchaeology laboratory. He went to the University of Arizona in 1973, serving as Professor of Anthropology and Curator of Zooarchaeology in the Arizona State Museum until his retirement in 1997. When he was working on writing his well-known osteology guides (e.g., Olsen, 1960, 1964), he consulted Barbara Lawrence.

Lawrence knew something about zooarchaeology (e.g., Lawrence, 1944, 1951, 1957, 1973), but she was trained and worked as a zoologist (Meadow, 1997; Rutzmoser, 1999). It seems unlikely, then, that Olsen had an opportunity through education, work experience, or collegiality to learn much about zooarchaeological technique. In the 1960s, for example, there was no formal textbook that discussed analytical techniques; a brief article by Ziegler (1965) was about as close as one could come to a statement on analytical technique. Not surprisingly then, in Olsen’s (1971) treatise on zooarchaeology wherein he introduced the term laundry list, he focused largely on taxonomic identification of faunal remains; of 28 pages of text and illustrations, 1.5 pages summarize the history of zooarchaeology (and introduce the concept of laundry lists), 8 pages illustrate skeletons of the vertebrate classes, and about 14 pages discuss issues of osteological identification. The remaining 4–5 pages identify research topics such as human diet, season of site occupation, butchering practices, tool and ceremonial use of animal parts, and skeletal preservation concerns. Only about 16 percent of Olsen’s treatise concerns anthropological zooarchaeology, yet descriptions of analytical techniques are absent.

Olsen likely was aware of the intellectual context of his time—that North American archaeologists were seeking to do anthropological archaeology rather than continuing to do descriptive culture history. What better way to signify he knew of that difference than to introduce a term characterizing early zooarchaeology as merely descriptive? But based on his subsequent zooarchaeological research, it appears that Olsen was unsure how to actually do anthropological zooarchaeology. And as noted above, anthropological zooarchaeology only really began to come into its own in the late 1970s (Figs. 1 and 2).

7.4. Positive use of the term

Few authors use the term laundry list in a positive way. Grayson (1981) did not use the term but suggested that taxa could be treated analytically as variables that vary in frequency of occurrence within a series of faunas or as attributes that vary in terms of presence–absence within faunas. The latter requires only laundry lists to analyze and interpret taxa that are present; a taxon could be absent from a collection for any number of reasons (Ervynck, 1999; Lyman, 2008). Thus, for example, Graham (1984) used the presence of a taxon in several collections to argue for environmental differences between the past and present in central Texas. He did not use the term laundry list. In a study similar to Graham’s (1984), Lyman (1986) used the term and noted species lists can be analytically valuable for inferring paleoecology. Reitz and Wing (1999:172) indicate the “much-maligned laundry list may be the best choice for some questions and for some samples,” but they do not identify what those questions and samples might be (see also Reitz and Wing, 2008).

Two examples of the modern value of laundry list data recorded prior to 1960 seem particularly pertinent to archaeological research. The first involves one of the (if not the) first computer-constructed paleozoological databases. Constructed in the early 1990s, FAUNMAP (e.g., Faunmap Working Group, 1996) is made up of a list of late Quaternary, chronometrically dated occurrences of mammals in the contiguous forty-eight United States. It is, in a very real sense, a truly huge laundry list. Yet it generated a tremendous amount of research and significant publications, and the database itself has been updated and upgraded into several other forms. Were it not for site-specific zooarchaeological laundry lists, none of these databases would have been worthy of compilation and analysis for want of pertinent data.

The second example of the analytical value of laundry list data is the on-going debate over the possibility of a human cause of terminal Pleistocene extinctions (e.g., Cannon and Melzer, 2004, 2008; Surovell and Waggoner, 2009). Virtually all recent analyses undertaken on this issue have used lists of species rather than taxonomic abundance data. This directly contradicts any suggestion that zooarchaeological laundry lists have no analytical value.

8. Conclusions

It is unclear how many inaccuracies have been said about the history of North American archaeology. The notion that pre-1970 zooarchaeology produced mostly laundry lists is one. The notion that there was a “stratigraphic revolution” during the second decade of the twentieth century has been stated in many histories of North American archaeology (Brown and Givens, 1996; Givens, 1992; Lyon, 1996; Schuyler, 1971; Willey, 1968; Willey and Sabloff, 1974, 1993) but this is another misperception. It has been corrected by detailed historical research (e.g., Browman, 2002, 2003; Lyman and O’Brien, 1999). This is not to say that what happened or causes thereof during some historical episodes are not debated. It is rather to say that detailed historical research not only detects misrepresentations of our discipline’s past, but it can often correct them, as for example debates about and clarification of Aleš Hrdlička’s role in North American Paleoindian studies (Meltzer, 1991 [and selected references therein], 2006). The typical characterization of pre-1970 North American zooarchaeology as largely involving the production of laundry lists of taxa represented in a collection of animal remains is only weakly accurate. Early zooarchaeologists, some of them trained as zoologists rather than archaeologists (e.g., Guilday, Parmalee, White, Wing), often provided interpretations of the faunal remains they studied that are readily categorized as human ecology studies. Topics these early researchers addressed involve the human behavior of butchering, season of animal procurement, prey demography, catchment area or foraging radius or exploited habitats, and of course diet. Laundry lists are a part of the pre-1970 literature, but they are also a fair part (20+ percent) of the 1970s literature. Not only should the history of North American zooarchaeology prior to 1970 no longer be characterized as

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1 Olsen’s zooarchaeological studies of domestication (e.g., Olsen, 1985) are important and exceed the criteria of a laundry list, but they are irrelevant in the present context.
resulting only or even mostly in laundry lists, but it should be recognized that laundry lists have always been and likely always will be a part of zooarchaeological research in part because the data they contain have analytical value.

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