SUMMARY

The validity of Ray's authoritative statements concerning the egalitarian nature of sociopolitical and socioeconomic organisation on the Plateau has, until fairly recently, simply been accepted as given. Rather than attempt to supplant this view with one labelling Plateau societies as organised at any particular level of complexity, I have attempted to address a number of dimensions along which inequality is expressed in mortuary behaviour, and suggest a means by which it may be measured on a continuous scale. And I have shown that there existed a considerable range in the degree of inequality in non-perishable burial wealth. Irrespective of where we place Plateau societies on the continuum from egalitarian to rigidly stratified social organisation, there is something to learn from examining the degree and kinds of inequality that are visible. The results presented here, I believe, have pointed out some of this potential.

Considerably more work needs to be done before the kinds of differences seen in mortuary analyses such as presented here can be translated into a fuller conception of meaningful behavioural differences in the living community. In the majority of Plateau burials from the prehistoric and protohistoric periods the display and subsequent destruction of wealth during the funeral does not outlive the memory of the witnesses. This is supported by the commonly high degree of aboriginal disturbance and the frequent superimposition of burials seen in larger circumscribed cemeteries such as those at Wildcat Canyon and Old Umatilla (Dumond and Minor 1983; Rice 1978a), in which the majority of graves are unmarked. While there are some notable exceptions from the early historic period (i.e. the carved wooden mortuary figures erected by the western groups of the Canadian Plateau and the mortuary sheds of the Wishram/Wasco), in general the absence of conspicuous surface structures over Plateau graves limits the role that the dead can play in validating the social position of the living. The special position of specific ancestors or even groups of ancestors cannot be recognised from their mortuary treatment and used to reinforce and naturalise dominance relationships in the way that funerary monuments in advanced chiefdoms and states frequently do.

Perhaps the need for wealthy high status groups in "incipient" or "simple" chiefdoms to repeat the display and continually re-emphasise their position provides a kind of "negotiated" levelling mechanism that prevents the accumulation and concentration of excessive wealth in the hands of a few individuals. It could also be argued that this in itself is only a secondary effect, and that the important feature of these societies is the use of exotic prestige items as gifts to build and maintain a group of followers. In this sense it may be that the elite at this level of sociopolitical complexity cannot avoid the expenditure of wealth, as this is the basis of social capital, used in turn to manipulate obligations and power within the community. What does seem likely is that the elite of any society will continually push and test the bounds of their influence and power in an attempt to increase it. It seems equally likely that the non-elite would resist any such attempt as long as it was in their interest to do so, if only as an indirect result of their own attempts to gain status and power (cf. Blau 1977).

This study has concentrated on elucidating the structure of Plateau mortuary behaviour as it relates to status differentiation. Age and sex, the primary referents of mortuary structure, were examined in some detail in relationship to grave inclusions, as well as to other dimensions of variability. An examination of age and sex representation revealed a paucity of subadults in a number of assemblages (relative to Weiss' suggested 30% minimum), and possibly over the Plateau as a whole during the prehistoric period. This likely reflects a combination of behavioural and preservational factors. Male and female representation, with the notable exception of the large burial population of Old Umatilla (with nearly twice as many females as males), is approximately equal.

An investigation of age and sex artifact type associations using a large pooled sample revealed some interesting relationships. As might be expected, adults tend to be associated with a number of

utilitarian artifact types, including projectile points, knives, pestles, shaft smoothers, and ground stone celts. Adults are also associated with tubular stone pipes, although there may be one instance of a pipe interred with a child. Subadults tend to be associated to a slight degree with ornamental items such as shell ornaments, copper pendants (but not copper beads), and glass beads. Artifact types associated with sex revealed some more unexpected relationships. Again, males are associated with a number of utilitarian types, emphasising hunting activities. But a number of females also appear to have participated in the hunt. The only non-utilitarian type associated with males are tubular stone pipes, and even this relationship is not exclusive. Females do not appear to be associated with any artifact types, including such items as digging sticks, which in the ethnographic literature are strongly identified with female activities. In no cases, barring those clearly susceptible to the effects of small sample size, were age or sex associations found to be exclusive.

The relationship between status (as measured by artifact richness), age and sex was also investigated using a pooled sample. Age appeared to be a factor involved in the structure of the distribution of utilitarian artifacts, but did not account for differences in sociotechnic artifact types. This suggests that a degree of ascribed status existed on the Plateau. Dividing the data into two time periods—the late prehistoric and the protohistoric—provided further insight along these lines. Contrary to what might be expected, the protohistoric period appears to exhibit a decrease in the amount of grave wealth deposited with infants and children relative to adults, suggesting less emphasis on inherited wealth at this time compared to the situation in the late prehistoric period. Males in both periods have on average greater wealth than females, although the distance between the two decreases in the protohistoric period to the point where it becomes largely statistically insignificant. This may be related to the increasing importance of marriage alliances at this time. Independent supporting evidence, could it be found, would greatly strengthen this interpretation.

Stryd (1973:89), suggesting that the existing evidence is not compatible with the degree of egalitarianism attributed to Plateau society ethnographically, wrote: "It is too early... to state whether status was simply achieved within an egalitarian society, or whether some form of ranking, possibly ascribed, existed." If one accepts that "rich" child burials are an indication of ascribed status, then the findings from many of the sites discussed here would suggest that some degree of ascribed status did indeed exist on the Plateau for at least the last ca. 2000 years. Both utilitarian and sociotechnic artifacts occur with infant/child burials, as well as with those of adults, and the degree of differentiation based both on number of types of goods and absolute numbers of items seems to be of roughly the same order in both groups. But, as has been frequently noted in the literature on mortuary analysis, the simple equation of rich child burials with the presence of ascribed status is highly problematic, if by this we mean a system in which such things as political office are strictly inherited. If, on the other hand, it is taken at face value, then it can be said with confidence that the intergenerational transfer of wealth was seen as an appropriate behaviour. Presumably this can be related to an attempt to increase the value of one's offspring in preparation for advantageous marriage and trade alliances (cf. Hayden in press). The distinction between this process and ascribed status is unclear, and may be largely semantic.

Lorenz curves and Gini indices were employed to investigate the degree of inequality in artifact richness seen in Plateau burial assemblages. The results indicate a varying degree of inequality, ranging from slight to considerable (G = 0.30 to 0.77 on a scale that ranges between 0 and 1.0). One useful contribution made here involves the presentation of a method of testing differences in Gini indices between assemblages, thus enabling them to be treated as samples concerning which inferences can be made, rather than as populations as has been the case in all previous archaeological uses of the measure of which I am aware. The interpretation of differences in inequality is not always straightforward and other lines of evidence frequently must be brought to bear, but the technique is nevertheless seen as having great potential.

One of the major goals of this study was to attempt to rank different burial forms in terms of their association with higher or lower socioeconomic status, as measured by richness of grave inclusions. The results achieved were mixed, largely due to problems with looting, the lack of consistent reporting of grave associations and number of individuals represented in burials (particularly in cremations), and difficulties in demonstrating contemporaneity. In the lower Middle Columbia region (largely equated with The Dalles-Deschutes), it can be suggested with some confidence that cremation represents the highest status form burial present in the late prehistoric and protohistoric periods. But outside of this area the relationship is far less clear. There is also some archaeological evidence that talus burials represent a lower status form of disposal than inhumations, but in most cases this relationship does not appear to hold.

Despite the considerable problems with lack of chronological control, it was possible to present a preliminary investigation of the development of socioeconomic inequality using mortuary data. The data were divided into three broad time periods—the middle prehistoric (ca. 4000-2000 B.P.), the late prehistoric (ca. 2000-200 B.P.), and the protohistoric—and compared on the basis of their Gini indices. While the late prehistoric and protohistoric periods could not be distinguished, the two middle prehistoric assemblages were found to exhibit significantly less inequality. A more qualitative discussion of a series of earlier sites from both the Columbia and Canadian Plateaus does not appear to indicate the existence of great inequality in mortuary behaviour at this time, although the available data certainly leave much to be desired. It is suggested that a marked increase in inequality occurred at roughly 2000 B.P. This approximate date appears to be supported by other lines of evidence, including richness of material culture, evidence of greater emphasis on long-distance trade, an increase in the use of both rock art and portable art, and settlement data.

The analysis of mortuary variability has often concentrated on a limited number of relatively well-known areas of the world wherein considerable social differentiation clearly existed. If we are to understand more about the *development* of social complexity, it is clearly in areas such as the Plateau that we will have to look. Irrespective of where we place Plateau societies on the continuum from egalitarian to rigidly stratified social organisation, there is something to learn from examining the degree and kind of, and the variability in, inequality that *is* visible.

The purpose of this study has been to examinine Plateau mortuary data from the perspective of socioeconomic status differentiation with the main emphasis on the differential distribution of grave inclusions, since this appears to provide the most meaningful and accessible expression of socioeconomic status inequality in the study area. Ethnographic data regarding the level of status inequality as expressed in both the living community and in burial practices has also been summarised. In some areas different forms of burial appear to be associated with higher socioeconomic status, while in other areas this relationship is unclear. The middle prehistoric period (ca. 4000 to 2000 B.P.) appears to indicate significantly less inequality in the distribution of grave inclusions than later periods. The late prehistoric and protohistsoric periods appear to exhibit similar levels of socioeconomic differentiation. Thus, the mortuary data seem to support a model of increasing socioeconomic inequality after ca. 2000 B.P. Neither the ethnographic nor the archaeological mortuary data support an egualitarian model for the Plateau. The differential distribution of grave inclusions indicates an unequal access to exotic prestige and wealth items.

Suggestions for Future Investigations

Much of the body of this work has been descriptive, emphasising only very basic pattern recognition. Little previous work on the investigation of socioeconomic inequality as expressed in mortuary behaviour has taken place on the Plateau, making this a necessary step. Data had to be acquired from various sources, many of which were unpublished. A surprising amount of information was collected in the end. While the results have pointed out a number of interesting relationships, some quite unexpected, they have suggested even more lines of inquiry for future analyses. Before I briefly discuss what I feel are some of the major research questions that could profitably be explored with mortuary data on the Plateau, I would like to point out that there is an enormous, largely untapped archaeological resource in the collections and fieldnotes of amateur collectors. While this information is usually less than adequate by modern standards, it can be nevertheless extremely useful. I would strongly encourage those interested in the archaeology of the Plateau to document and make use of this resource before the remaining collections are sold or forgotten.

The placement of grave inclusions in relation to the body within the grave could potentially be of great interest in the study of how the objects were perceived and how they functioned in the mortuary ritual from an emic perspective. These data may be available for a surprising number of sites. Combes (1968), for example, includes detailed diagrams showing the placement of grave inclusions around the body for all of the burials at Fish Hook Island. In other cases both published and unpublished photographic documentation provides an equally useful source. Artifact placement can be used to help determine the function of an item, an excellent example of which is provided by McGuire (1992b), who distinguished hair pins in Hohokam graves by their position near the head. Lacking this information, it could be difficult to differentiate hair pins and such items as decorated awls or blanket pins. Placement can also be used to suggest or even to test hypotheses about the importance attached to an artifact class, specifically whether it was considered to be utilitarian or ceremonial. I am thinking particularly here of the placement of exceptional projectile points or large, finely made bifaces in relation to the body. The placement of such a

biface behind the head of Burial 11 at 45-OK-66 (Grabert 1968:Plate 22), for example, suggests a special role for the object beyond any functional use.

The recurrence of certain artifact types with one another is an important aspect of mortuary analysis, but one that I have barely been able to address here. Given a large enough sample, it is almost certain that patterns will emerge, and that these will reveal the ability of different artifact classes to mark socioeconomic status, among other things. Even the exploratory analysis attempted here shows some of this potential (e.g. the strong association of *Dentalium* and copper in the protohistoric period). The main problem is that, given the small sample sizes available combined with the relatively great variety of artifact types, this kind of analysis is not possible at the level of the individual site, which for the most part has been the focus of the present research. These difficulties may be alleviated by pooling data from a number of sites, as was done in the investigation of age and sex associations, and/or by collapsing artifact classes. Both of these solutions are not without their own problems, but nevertheless it is still possible to investigate broadly occurring meaningful patterning.

Technical studies involving material sourcing and knowledge of manufacturing locations, processes, and costs have barely begun on the Plateau. The only materials that have been subjected to fairly extensive analysis are obsidian, and, to a lesser extent, *Dentalium*. Too often, ground stone celts are identified as "Fraser River nephrite" in the absence of petrological examination, ignoring the possibility of alternative sources. The same may be true of steatite. The failure to adequately investigate prehistoric use of native copper, and the assumption that all copper is of Euroamerican origin is another obvious problem. Sources of marine shells and the identification of different species within such genera as *Dentalium* is another area that has recently received some attention (Barton 1990; Erickson 1990). The results of this research are particularly important in light of the ubiquitous presence of such shells in Plateau burials, together with their presumed wealth connotations. Sourcing of a number of additional materials, both common (e.g. red ochre and high quality cryptocrystalline lithic material) and rare (e.g. galena and turquoise), would also be of great use in investigating the extent of trade networks and the nature of the items exchanged between regions.

The study of trade networks begins to address the wider question of regional interaction. Hayden (1993) has proposed that the elite of different groups on the Plateau participated in a Plateau-wide interaction sphere, involving the restricted circulation of various prestige and wealth objects. Sourcing studies are a good beginning towards testing the validity of these claims. Another line of evidence that should be investigated involves the analysis of parietal and especially mobile art and its stylistic and iconographic content. Such data are potentially more useful in determining the nature of interactions.

One area that has yet to be adequately investigated on the Plateau is the association between burial and habitation sites. To some extent this is related to the scarcity of radiocarbon dates, especially for burials. Together, the study of burials and settlements provide some of the best available archaeological evidence for socioeconomic complexity. It is especially important to be able to correlate the two kinds of evidence given recently expressed concerns about the potential for mortuary ritual to distort or even invert social relationships held in life (Braithwaite 1984; Hodder 1982, 1984, 1986; Parker Pearson 1982, 1984; Shanks and Tilley 1982; Shennan 1982; McGuire 1992a, b). The tendency to bury the dead some distance from the village, combined with intensive re-use of the landscape in attractive restricted locations, presents a serious challenge to this type of study. Nevertheless, it is essential that such work be undertaken.

Unusually detailed analysis and problem oriented excavations at Keatley Creek (EkRl 7) in south central British Columbia provide evidence suggesting preferential access to exotic raw materials (e.g. high quality lithics, native copper, etc.) by the groups occupying the larger housepits at the site (Hayden 1990a; Hayden and Spafford 1993; Spafford 1991). If a contemporaneous cemetery for the village site could be found, it would be possible to correlate these two strong lines of evidence. In some cases, it may already be possible to associate cemeteries with their contemporaneous village sites (e.g. Old Umatilla, 35-UM-35A and B; Berrian's Island, 45-BN-3). But the level of detail found in available reports still does not permit the kind of intrasite analysis that is needed.

If large, bounded, relatively long-term cemeteries mark the presence of corporate groups and their claims to important, spatially restricted resources (as discussed in Chapter 2), then it would be expected that individuals that are excluded upon death from these cemeteries participated to a lesser extent in the corporate group. Such burials should on average be poor relative to burials in cemeteries. While the observation is admittedly subjective and tentative, it appears that there may be meaningful differences in artifact associations, at least in some areas of the Plateau, between burials found in larger cemeteries and more isolated burials. Given my concentration on larger burial sites, it has not been possible to investigate

this possibility. One problem is that the recovery of isolated burials often occurs either 1) through the activities of amateur collectors, or 2) through the recovery of disturbed remains in a salvage context. Inneither case can it usually be stated with any degree of confidence that the burial was not part of a cemetery.

Another area that could profitably be explored involves the investigation of intracommunity differences in salmon consumption. While innovative stable carbon isotope analyses have been conducted in British Columbia, and have to varying degrees examined salmon use in the interior (Chisholm 1986; Chisholm et al. 1983; Loyell et al. 1986), these studies have been regionally based and preliminary, using skeletal materials with poor context other than locational. They have not addressed the possibility that, for some Plateau groups, lifetime differential access to salmon resources may have existed within the community. (Even less research using stable carbon isotopes has taken place on the Columbia Plateau; the few measurements that exist are from burials recovered in salvage contexts, and at least one is highly problematic. Chatters [1986] reports a d¹³C value of -26 per mil—the normal range of variation in humans is from approximately -12 to -21 per mil.) Thus, one might propose a model in which, as one moves further away from major salmon bearing streams, access to the resource becomes increasingly restricted along lines of socioeconomic status. In salmon-poor areas, those individuals with greater access to other forms of wealth, and who would therefore be expected to participate to greater extent in the regional trade network, would have better access to salmon, assuming that the fish was seen as a desired food. As noted in Chapter 2, the elite also tend to marry outside of the immediate community or locality with greater frequency, and so could be expected to have greater access to productive salmon sites through kinship ties than other members of their communities. In salmon-rich areas, on the other hand, other foods, such as deer, may be seen as more desirable (Teit 1900; Romanoff 1992a). It is possible to address this type of question through stable carbon isotope analysis. Part of the significance of the present work is that it lays the groundwork for future research involving the relationship between socioeconomic status differences and salmon consumption.

Stable carbon isotope studies also have the potential to address the possible role of the intensification of salmon utilisation in the development of increased sociocultural complexity on the Plateau. This is still an highly contentious issue, energetically debated in the literature (e.g. Thomison 1987; Johnston 1987; Ames and Marshall 1980).

As should be apparent by now, by far the most pressing problem in adequately dealing with Plateau mortuary variability from any viewpoint, whether chronological or socioeconomic, is the almost complete lack of radiocarbon age estimates on burials, particularly from the major sites excavated prior to the last two or three decades. The paucity of dates and detailed skeletal analyses is even more of a concern given the repatriation of Native human remains and associated objects. While I am not suggesting that these remains should not be returned, their future unavailability means that any programme of dating and chemical analysis must be implemented immediately. It is to be hoped that agreements can be reached between the academic and Native communities involved that will not only allow, but encourage the timely development of such a programme.

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