SOME PROBLEMS IN THE ANALYSIS OF GLASS BEADS FROM POST-CONTACT BURIALS IN SOUTHEASTERN WYOMING

By

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An Indian burial dating from A.D. 1800 or later on the High Plains rather obviously calls for some speculation concerning the date of interment and the tribal affiliation of the decedent. The association of trade goods of European manufacture automatically places the maximum probable date at no earlier than A.D. 1800. The trade goods themselves provide the most logical framework for more precise dating due to the rapidity of cultural, social, and technological change in that period. Geographical location of the burial site or feature may be a significant factor in analysis.

European goods could be associated with burials of earlier date in eastern Wyoming but these instances must be quite rare. The only Caucasians present in the area before 1806 were members of the LaVerendrye expedition who apparently did get into what is now Wyoming (Larson, 1965). Some Spanish, French, and English trade items must have travelled within aboriginal circles to the High Plains before A.D. 1800. Secoy's "Gun Frontier" (1953) is thought to have closed with the "Horse Frontier" in the Wyoming area around A.D. 1750. If this is the case, certainly other foreign goods were present also.

By and large, however, European goods were by no means common anywhere in the Wyoming High Plains until after the Lewis and Clark Expedition of 1804-1806. Manuel Lisa followed this expedition rather closely in establishing a trading post at the mouth of the Bighorn River in 1807. Trader traffic along the Missouri and Yellowstone Rivers increased rather rapidly thereafter. Although the present Wyoming area was penetrated by such intrepid frontiersmen as Colter, Rose, Greenwood, and the Wilson Price Hunt party, Robert Stuart's Astorians, and the Ashley Expedition, little effort was made to trade with the Sioux, Cheyenne, or Arapaho until the middle 1830's. This was due in a large measure to the addition of robe trading emphasis to the earlier heavy orientation toward beaver hunting. Permanent trading posts were established in rapid order on the High Plains from the Arkansas to the North Platte. The aborigines were little spared from the already established cutthroat competition between fur companies. Robes were in demand and the most efficient, and perhaps the only, way to get them in paying quantities was to poison the most Indians the fastest with a vile concoction known as "trade whiskey". The unsophisticated savage was inclined to feel that if the trader's potion did not include such meaty additives as tobacco juice and red pepper, he was being cheated. Few robe traders desired to lose their hair or their customers over charges of offering wishy-washy firewater (Hafen, 1956). The robe trade of the 1840's especially, from the trader's point of view was one which tolerated little room for scruple.

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Trade whiskey apparently did not become a "necessity" in the eastern Wyoming trade until about 1840. There were only three permanent trading posts in the whole of Wyoming prior to that: Fort William, Fort Bonneville, and Portuguese Houses. These were all primarily supply bases and wintering quarters for beaver hunters.

In 1841, Lancaster Lupton brought part of his South Platte drainage operation north and located near the mouth of the Laramie River near Fort William. The beaver kill had declined and the market was badly bent. Buffalo robes would sell and could be had if they could be pried away from the Indians. Fort William was replaced with a new post at somewhat greater distance from Lupton's Fort Platte and the race for robe trade was on. Traders armed with kegs of firewater and piles of trade goods emanated from the competing forts in all directions, following the bands over much of their territory. Fort William's replacement, Fort John, proved to be the most durable, and Fort Platte folded in 1845. The owners of Fort John were glad to sell when the U. S. Army made an offer for it in 1849 in order to occupy its location. This military post, Fort Laramie, was one of the major frontier installations of its kind until its abandonment in 1890 (Hafen, 1938).

Most of the Indian trade along the North Platte and throughout the rest of eastern Wyoming was handled by small operators after the demise of Fort Platte. Squawmen like Bordeau and Bissonette scattered themselves along the North Platte to trade with relatives and the kinsmen of relatives, and the growing numbers of emigrants on the way west. After the Civil War, many of the small traders were half-breed sons of earlier traders and trappers (Hanson, 1955).

Few Plains Indians cared to involve themselves seriously in supplying beaver skins for trade. Buffalo robes, however, were a traditional commodity. Horses stolen from Peter and traded to Paul, meat, buckskins, and other goods were always marketable to the Europeans. These brought in some trade goods to the eastern Wyoming tribes from the time of contact onward. The distribution of trade goods among all the front range tribes in Wyoming and Colorado accelerated rapidly with the establishment of permanent trading posts and increased demand for robes in the 1830's.

A quite high percentage of European goods distributed was probably interred with an Indian owner at death. If a comprehensive comparative table of each of the permanent trading post's annual inventory between 1830 and 1875 could be assembled, it would seem possible to trace a majority of historic burial assemblages to one or more sources during a relatively brief span of time.

Unhappily, no such inventory lists exist that would be very useful for this purpose. Further, most of the trading stations themselves seem to have been plowed through by farmers, built over by later entrepreneurs, or have been excavated with inadequate techniques and reported with inadequate coverage.

Of the hard goods which survive the ravages of time, if not some of the other threats, glass beads seem to be the most sensitive indicators of temporal changes in taste or the spatial variability of demand. In the writer's experience, the common beads are the only variety which can be depended upon for informative distribution. The larger

fancy beads were more expensive, had greater care, and were less easily lost to turn up again in a random sample from some trading post.

In the vicinity of Fort Laramie National Historic Site, there are at least ten sites of Indian trading posts. On the National Historic Site itself, there are four: the Sutler's Store, Fort John, Ward & Guerrier's Deer Creek post, and Bissonette's. Located elsewhere are the sites of Fort William, Fort Platte, Fort Bernard Bordeaux's, Gratiot Houses, and Ward & Guerrier's Sand Point post. The writer has examined three of these which exhibit strikingly individual traits in the common bead samples recovered. The other sites mentioned have either not been examined, cannot be found, were subject to excessive intrusive influence, or were occupied for too long a period to provide temporally significant traits.

Fort Platte: 1841-1845.

This site is mutilated by farming and land-levelling activities. The majority of the common bead sample recovered is fairly coarse--comparable to the present size #8 or #10. Most are medium blue; ca. 45 in number. Next most common is opaque white; ca. 15 in number. These average a little larger than the blue. Red with white centers are represented by seven specimens, one of which is a very large "pony bead" size, and additionally there are four yellow, two white with pink stripes, and one black specimen complete the inventory.

Gratiot Houses: 1849-ca. 1868.

Most of the sample is thought to date from August, 1854, when the Sioux made off with stored annuity goods after the Grattan disagreement (McCann, 1956). About 95 percent of the common beads suitable for embroidery work from this site are about equally divided between red with white centers and plain white. The average size is perceptably smaller than at Fort Platte.

Ward & Guerrier's Deer Creek Post: 1857-ca. 1860.

Part of this sample is very similar to the Fort Platte sample, being coarse sizes of blue, white, black, and yellow. The other part is made up of markedly smaller specimens, many smaller than the size # 13 of today, in a gamut of colors from clear to black, with many pastel shades.

At one time the writer was willing to make more of these obvious differences than he is now. This partly stemmed from the instantly evident comparability between a small sample recovered from the scaffold burial site of Mini-Aku and the newer variants from Ward & Guerrier's. Mini-Aku and her family are known to have dealt with Seth Ward from the late 1850's to the mid-1860's (Clough, 1967). Additionally, samples from various campsites appeared to compare well with the Fort Platte material in size range and color distribution, giving the appearance of discernable time-bracketing.

Many specimens from the North Platte River drainage were handled. After extensive

consideration of the many variables potentially affecting the selection of common beads at a given burial site, it was necessarily concluded that the three datable trading post samples were simply not adequate bases for chronology judgement, even in the nearby area.

Personal preference in selecting size and color might influence a total burial sample to the extent that all of a purchase from Fort Platte could very well appear as though it came from typical Gratiot Houses stock. In turn, the Gratiot Houses sample may, if of treaty goods derivation, be deviant from what would ordinarily be in greatest demand in that area at that time. Appropriate selection of a purchase from Ward & Guerrier's might be wholly typical of the earlier Fort Platte material. To make matters worse, the smaller variant at Ward & Guerrier's is observably very similar to a burial sample known from the 1880's or 1890's.

Although the situation is not hopeless, cross-correlations by visual comparison of common bead samples is chancy at best. After some experience in handling trade goods, and beads in particular, the writer is inclined to the view that sheer subjective impressionism and "hunch" are as valid and practical as any other guidelines available today for dating the common beads from eastern Wyoming. This of course presupposes a good deal of experience in handling reliably dated material. About the best that can be reliably conjectured on this basis is a "pre-Civil War" or "post-Civil War" judgement.

Satistical analysis of bead color or dimensional data from dated locations would appear to have very limited applicability to any serious problem. The potential variables determining size and color content and ratios to be found at any burial site are very numerous and not all are predictable. Embriodery pattern, size and nature of the decorated item, gender and age bracket of the owner, influences of current popularity, personal taste and wealth, etc., etc., could all strongly affect the nature of the ultimate sample.

It would appear that the only practical means of dating glass beads from burials with relative certainty calls for a direct dating technique. Man-made glass is much more susceptible to attack by water than is obsidian (Brill, 1963), and at least some kinds of glass beads are no doubt suitable for dating by means of the weathering crust (Brill, 1961).

The source of a common tale alleging that "seed beads" were not available in the Plains country before about 1840 in unknown. It is perpetuated by Lyford (1940), who indicates that the somewhat larger "pony beads" (comparable to most of the Fort Platte and Spring Creek Burial samples) were the kind brought on pack ponies by mountain man-traders before that date.

Although the coarser sizes may have been popular early due to greater ease in embroidery with an unfamiliar medium, the "seed beads" were certainly not unavailable. The writer has two "seed bead" specimens dating between 1834 and 1838 which came from one of Captain Bonneville's trading stations. These smaller sizes were on the market and very popular in the eastern United States by A.D. 1600 (Ritchie, 1954).

Murray (1964) appropriately observes that common beads in the Fort Laramie collection do not bear out the concept of two specific size ranges, i.e., "pony beads" and "seed beads", but more nearly form a continuum. However, the Fort Laramie collection is made up of a miscellany of samples from the general area. Many of the samples are simply labelled "surface finds" without regard to locality, and some are from archaeological work at Fort John and the Sutler's Store. Represented in this assemblage is material from 1834 or earlier to 1876 or later, and it is not possible to observe cross sections from given localities and brief time spans with any certainty.

At this time, dating estimates derived from experience-based subjective evaluation of bead samples seems to be at least as reliable as laborious quantitative analyses. Very little money should be wagered on either technique if there is any possibility of using some direct dating method such as oxidation crust lamination counts.

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