BOTTLES AS AN AID IN SITE DATING AND IN COMMERCE RESEARCH

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Anthropology 377
May 26, 1982

ACKNOWLEDGEMENT

I would like to thank Bill Dederick for both directing and aiding my research on this subject. As my original knowledge of bottles was limited, I relied on Bill to help me with dating the bottles we excavated.

In any archaeological site, glass is both a plentiful and important artifact type. Certainly this is the case in the Knick High Hollow Site. Except, perhaps, for nails and other metals, bottle and jar glass is our most plentiful artifact. The bottle and jar glasses are particularly important for our ability to accurately date the bottles. In this paper I will attempt to present a typology on the bottle glass we have found in the Knick High Hollow location. I will concentrate particularly on those bottles containing "patent" medicines and on the whiskey bottles we have found. Also, the large number of mason jar fragements we have found leads me to investigate this area as well. It is my hypothesis that the large amounts of literature available on bottles can help us to date the occupation of a site, as well as to comment on the amount of commerce the inhabitants conducted with outside sources.

PROPRIETORY MEDICINES

The proprietory, or "patent" medicines are a fairly old bottle type, and the varieties are practically endless. Although these are referred to as "patent" medicines, William C. Ketchum, Jr., (p. 76) points out that the very ordinary nature of the medicines' ingredients kept most manufacturers from seeking patents, which demanded complete lists of ingredients.

Patent medicines fell in three general categories: vegetable compounds, spring waters, and sarsaparilla. (Hanson, pp. 32-33)

Hanson comments in this section that the vegetable compounds were the most common. "Another type, strictly fraud, were bottles of water from springs and creeks that were advertised to cure diseases from arthritis to cancer. An analysis of these 'magical' waters always turned up the same conclusion: H_2O, with no other ingredient of medical value." (Hanson, p. 33) Sarasaparilla was comprised of herb and vine extracts, and were used "to purify the blood from poisons accumulated during the winter." (Hanson, p. 33) These were particularly popular due to their high alcohol content.

Particularly interesting about these medicine bottles is the advertising techniques used in selling them. Newspapers and almanacs ran a great number of advertisements concerning these patent medicines. Hanson provides an interesting analysis of these ads. These "usually consisted of scaring the reader with stories about terrible diseases, then in the latter part of the ad telling him not to worry their wonderful medicine could easily cure it. There was also the letter of testimonial from various individuals." (Hanson, p. 33) The major medicine manufacturers published almanacs providing information on various subjects and including advertisements proclaiming the value of that company's various products.

Another popular selling technique was the travelling "medicine man." Ketchum (p. 86) notes that there were two distinguishable types of medicine men; "low-pitch" medicine men relied on their salesmanship to sell their wares on street corners, while the "high-pitch" salesman often offered a variety

show before attempting to sell his wares in earnest. "These medicine shows were often the only theatrical productions available in rural areas and were always well attended." (p. 86) This could be particularly important in the High Hollows Sites in that a large number or variety of these medicine bottles would indicate that these medicine shows were indeed an important part of rural life during the occupation of these sites.

In January of 1907, the Pure Food and Drug Act put an end to the age of quackery. Collier's Magazine ran a very influential series of articles proclaiming the potentially dangerous side effects, including narcotics and alcohol addiction, incumbent in extensive use of these patent medicines. Upton Sinclair's muckraking investigation of midwestern meat packagers also pushed the passage of this bill. (Hanson, pp. 34-45)

We found a great number and variety of medicine bottles in the High Hollows region. These range in age from the late 1840's through the early twentieth century. This, obviously, is about the full period of occupation for the Knick site, that is, until the Pure Food and Drug Act ended the age of quackery. Probably the oldest and most interesting bottle was found at the base of the chimney in the cabin. This hand-blown bottle, with its highly oxidized cloudy glass, probably dates from the 1840's. A pronounced pontil scar is clearly visible at the base of this bottle where the bottle was broken off from the blow-pipe. Other medicine bottles, including "Dr. Kilmer's Swamp Root Kidney, Liver, and Bladder Cure"

and "Pain King," date from the 1880's. Later fully automated machine-made bottles are un-embossed but are of patent medicine bottle shape.

As I mentioned above, the method of distributing these patent medicine bottles--the travelling medicine man--was often the only entertainment available in rural areas. The large number of these bottles indicates that the High Hollow inhabitants attended these exhibitions. As will be the case with the spirit bottles and canning jars, these bottles not only help date the site, but also comment on the commerce which the High Hollow inhabitants engaged in.

WHISKEY BOTTLES -(See Appendix A)

What I will here refer to as whiskey bottles may well have held wines and other various spirits. Unlike the patent medicine bottles, the spirits bottles were rarely embossed with manufacturers' names. We are forced, therefore, to use mold types and bottle company marks to determine the age and origins of thse artifacts.

Generally, there are four bottle types which offer us the ability to accurately date the bottles and, thus, the occupation of the site. Hanson (pp. 8-9) discusses the pre-Civil War, three-piece molds, post-Civil War, and fully automatic machined bottles. The pre-Civil War bottles were widely discontinued by the 1860's. It was hand blown in a mold and required the neck and bottle mouth to be hand formed. ~~The three piece mold was popular through the 1880's and required~~

~~the neck and bottle mouth to be hand formed.~~ The three piece mold was popular through the 1880's and required that each of the three pieces, as well as a mouth, to be fitted to complete the bottle. The post-Civil War bottles required only partial completion of the bottle neck, as opposed to the full completion necessitated by the pre-Civil War bottle. This, Hanson notes, is due to the fact that the post-Divil War bottles were blown into "closed," rather than open, molds. The closed mold allowed almost total completion of the nect. Finally, the automated machine ottles, with their highly visible seam running the entire length of the bottle. These bottles began to appear in the early twentieth century.

At the Knick High Hollow Site we have found several full whiskey bottles and flasks which can help to date the occupation of the region. The earliest full flask dates back to about 1890; we can tell this because the seam stops at the base of th- bottle's neck, a sign that this belonged in the "post-Civil War" category. There is also no machine ring at the bottle base. We also excavated two nearly identical one quart, fully automated machine-made, clear whiskey bottle. Both were cork sealed and had a seam running the entire length of the bottle. These bottles date from about 1910. Another bottle, a machine-made, amber, screw-top bottle, dates from the Prohibition era. During this time period the Federal Government mandated that every bottle be embossed with the declaration:

"Federal Law Forbids Sale or Re-Use of this Bottle." Although this was not a whiskey bottle, as it dates from the Prohibition era, its shape is the same as the earlier wine and spirits bottles; thus its inclusion in this section.

The number and variety of whiskey and spirits bottles indicates that the High Hollow inhabitants engaged in commerce with people outside their immediate region. A tavern existed several miles farther up the trail from the Knick site, and the bottles could have been purchased there, but they obviously originated from outside this area. These bottles also call into question the number of stills thought to exist in the area. Although romantic mythology would have it that stills were abundant, the large number of whiskey bottles, while not directly contradicting this notion, certainly makes us reconsider this position.

FRUIT JARS

Fruit and canning jars were first developed by Nicolas Appert as a method of preserving food in an airtight container. Through his 1810 publication, The Art of Preserving, Appert shared the fruits of a decade's research on the subject. From that point until the present fruit and canning jars have been an important part of many kitchens. (Ketchum, p. 148)

While the earliest canning jars were free blown, these had largely disappeared by the time we are concerned with 1865-1930. In 1858, John Mason produced the first screw-top jars, which we still know as Mason jars. During the life of his patent,

Mason's jars were imitated with several slight alterations. All of these bottles were produced in molds. The most popular of these jars were and are produced by Mason, Ball, and Atlas.

The Knick High Hollow Site is notable for the large number of canning jars and fragments which were found. Specimens of several varieties of Ball and Atlas jars were abundant throughout the site. The Atlas Strong Seal Mason, and Atlas Strong Shoulder Mason jars, both dating from the early twentieth century, were especially prevalent in the south-eastern corner of the cabin operation. The Ball Perfect Mason jars appeared as well. This, I think, indicates that this area may have been a ~~patnly~~ pantry of some sort.

The use of canning jars is important for another reason as well. The oral history of the Knick Site indicates that there was a large amount of subsistance in this area. The use of canning and preserving jars would support this hypothesis, as this indicates that the inhabitants of the Knick area were farming and canning their crops. The diversity of the jars we found indicates some commerce with the local merchants who supplied these jars.

It is interesting that we find no canning jars from the nineteenth century. While it is possible that these older jars were fragmented beyond recognition, this is not likely, as whiskey and medicine bottles survived from the mid-1800's. Another possible explanation is that there was very little change in the jars once the original molds were developed. Therefore, the most probably explanation for the lack of early jars is that some of these jar fragments formed older bottles than this diagnosis is able to determine.

I began this paper as an attempt to date the occupation of the Knick High Hollow Site, as well as to comment on the commerce of the site. By concentrating on patent medicine bottles, whiskey bottles and flasks, and canning jars, I was able to substantiate the oral history concerning the site's occupation in that we have bottles ranging from about a century beginning in the 1850's. This corresponds very well with the oral history. The mythology of self-sufficiency among the inhabitants, however, was not substantiated by my research. Although the large number of canning jars indicates that the High Hollows residents preserved much of their food, the whiskey and medicine bottles indicate that there was a good deal of outside commerce. In short, I feel that bottle research is very helpful in drawing conclusions about rural sites in this and other areas.

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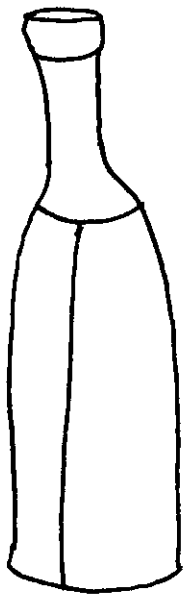
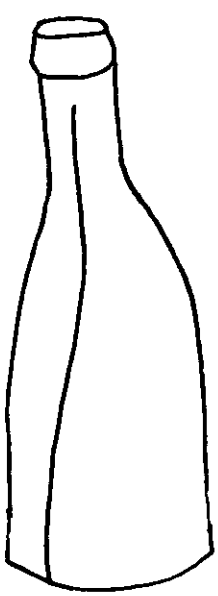
Ketchum, William C., Jr., The Treasury of American Bottles. New York: The Ridge Press, Inc., 1975.

APPENDIX A

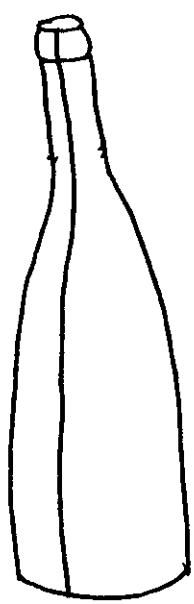
PRE-CIVIL WAR



THREE-PIECE MOLD



POST-CIVIL WAR



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On my honor I have neither given nor received any unauthorized aid on this paper to my knowledge. The work presented is my own except as footnoted.

William F. Dunn