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Archaeology *as a* Key *to the* Colonial Fur Trade

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ARCHAEOLOGICAL STUDY of the fur trade in eastern North America has been to a large extent object-centered. There are several reasons for this. The early Colonial fur trade was carried on at coastal ports and white settlements and did not involve any permanent business establishments. The trader resident among the Indians and the established fur trading post were features of the later westward expansion, not of the early trade. Such shoreline trading sites as did exist have largely been destroyed by the erosion and land subsidence which has been almost universal along the Atlantic Coast. The white trader, therefore, has left little trace, either among documentary sources or in the ground. He must be followed through the occurrence of his trade goods in Indian sites.

European goods are useful in dating aboriginal sites, yet in almost every case, dates for specific types of European-made objects have to be derived from archaeological contexts, since the literature and other sources of Europe contain little information on ordinary manufactured products.[1] Craft secrecy and general illiteracy combined to obscure the history of crafts, and most of the trade goods from the sixteenth, seventeenth, and early eighteenth centuries must be analyzed and dated by the techniques of prehistory. This is done by finding them in sites which can be dated, and then dating other sites by finding in them items which have already been dated by excavation. Such a process would be very faulty if it were applied in a chain-like fashion, but it can be markedly valid when archaeologists deal with large samples from many areas and with interlocked networks of sites.

The gunflint industry, for example, went through a succession of technological stages. European literature and manuscript sources provide little information, practically all of it later than 1780. Most of what we know about early gunflints has come out of American soil, and our dates for steps in the evolution of the fire flint depend upon site contexts in North America.

Glass beads are the most useful gauge for dating American Indian sites of the Colonial period. They occur in abundance and were subject to rapid changes in technology. There are many distinct types — more than a thousand in North America — and their styles show a pattern of cyclical recurrence, with only minor differences to distinguish

[1] Dutch and English white pottery pipes are a notable exception, but even in this case we lack documentary material from earlier times, and few European pipes came into Indian possession before 1650.

the beads of one decade from those of their recurrence five or more decades later.[2] But given correct identification, they permit very precise dating. Moreover, bead types seem to be international in their distribution, and their dates appear valid on a world-wide basis. Systematic studies of the trade bead types of North America, Africa, Asia, India, and South America will no doubt lead in time to new insights concerning European glass manufacture and world commerce in this era.

Context data for trade goods has been derived from sites of Indian towns, from the association of types in Indian grave lots, from occurrences in documented house sites of early settlers, and from artifacts found on the sites of military operations. Military camps of short duration and houses which were burned at a known time have provided critical samples, but all sites have yielded valuable source material for the history of European technology. Craft objects which are intermixed without regard to date in the superficial layers of European sites may be found delicately separated by decade in the sites of Colonial America.

A striking example of the usefulness of such archaeological data is a recent breakthrough in the history of American pewter. Scholars had long been puzzled over the problem of distinguishing the work of Francis Basset I of New York, who worked between 1730 and 1755, from that of his son, Francis Basset II, who worked from 1754 to 1777. Valuable inferences on technological and stylistic changes in pewter making awaited identification of the work of the two men. However, it had been impossible to say which touch mark was used by the father and which by the son.

The answer came from the site of Old Kuskuskies at West Pittsburgh, Lawrence County, Pennsylvania, a Wyandot town of 1747–51. This band of Indians had killed some French traders on the Sandusky in 1747 and had fled east to the British-dominated area. The site is tightly documented and dated, and the objects found there are all consistent with the dates. The Wyandot had attended a conference in Albany, New York, in 1742.

Among the various objects inclosed in a crude coffin with the skeleton of a child were two bronze medals of George II and Caroline, which we believe were minted in 1738, and two pewter porringers with handles in an early eighteenth-century British style. They were carefully cleaned, and a legible Francis Basset touch was found preserved in the corroded metal of one of them. Because of the date of the site, this mark had to be that of the father; therefore all Basset pieces with this mark are his, and all those with the other Basset mark are by his son. A problem which had been considered insoluble was thus cleared up.

THE EARLIEST fur trade was carried on by unrecorded fishermen and coastwise travelers, who protected their monopoly by a conspiracy of silence. We do not know whether this traffic began in 1498 or before 1400. Even archaeological evidence is remarkably sparse. Perhaps the major trade goods were perishable materials such as woolen fabrics; hemp (marijuana) may also have been an important commodity.

Indian sites of this stage are extremely difficult to identify and interpret. Each village normally includes a single piece of European brass, usually a delicately made and finely joined tubular bead. What trade goods exist are concentrated in a few of the graves. A Seneca village in the Genesee Valley is the best studied site of this stage. It yielded one brass bead, and less than 1 per cent of the graves contained European goods. The trade objects are quite different from those of any later stage. They are not goods made for the Indian trade, nor are they the ordinary domestic objects of Europe; they reflect the ways of the sea.

Among parts stripped from ships are bolts,

[2] A systematic study of glass bead types is not yet available. However, Kenneth E. Kidd of Trent University, Ontario, has such a monograph in preparation.

metal rings from rigging, and metal tips from belaying pins. Broad, thin knives appear to have been specialized tools of the fisherman. Spiral brass earrings, worn in the left ears of Indian burials, represent a direct transference of the ancient sailor's caste mark; this was the seaman's charm against bad eyesight. Strings of glass beads, especially in blue, probably came from sailors who wore them as a protection against the evil eye. Thin-walled tubular beads with large openings, spherical blue beads of a widespread type, and faience beads formed upon a subspherical clay core are characteristic. Brass kettles were cut up into ornaments and knives; even bails and tabs which held the bails were used. Steel axes were so precious that they were sawed with slabs of sandstone into narrow chisel-like blades, and their eyes were ground into adz blades. Sawed-up axes, some of the bead types, large knives, and ship fittings are considered diagnostic of this earliest stage.

The sites with objects from the earliest trade have been tentatively dated at about 1550 on the basis of seriation with later sites. The St. Lawrence Valley, the Maritime Provinces, and Newfoundland should yield more precise information on this stage, since early trade and fishing are believed to have been centered there, but little work has been done in that area. Sixteenth-century sites of the Gulf drainage basin are even less known. In the coastal plains and piedmont of the Southeast, major Indian villages which probably date from the late 1500s have not yet produced European objects.

Trade goods from the late sixteenth century are almost as little known as those of the first stage. Village sites are thinly scattered with brass and iron scrap, so that any token excavation produces a brass bead, a steel knife fragment, or debris from the native reworking of European metal. Glass beads seem to be absent from living areas; most are found with infant burials.

The most distinctive and numerous object is an oval glass bead, opaque and ranging from faded white to jade green to blue in color. It is found only in this horizon.[3] Chevron beads are more numerous than in later sites. Although found in small percentages as late as 1640, they are abundant only in sites earlier than 1600. Flush-eye beads are also diagnostic of sites from the second stage of the trade. Both chevron and flush-eye types are closely related to Islamic mosaic glass.[4] Steel table knives and steel axes are present but not abundant, and brass was known, but kettles were still cut up rather than used as cooking utensils. A few steel axes were sawed into smaller tools.

THE 1590s brought a revolution in the fur trade, with a vast increase in European contacts and reorganization of aboriginal power centers. The Hurons, Iroquois, Susquehanna, Powhatan, and Cherokee became the great middlemen in the fur trade, trapping, buying, and looting beaver from the continental interior and carrying it to nearly depopulated coasts for rendezvous with sailing ships. Very few European objects traveled west of these five native political groups; most trade goods stayed in their towns. Intertribal wars began for control of the trade and for access to interior beaver hunting lands.

The third stage, beginning somewhat before 1600 and extending into the 1620s, coincided with the first successful French, British, and Dutch colonies but probably had little connection with them. Many trade objects which are well known from the Indian sites have never been found where white settlements existed nor in the port towns. A conspicuous example may be noted at Jamestown, where despite the abundance of glass trade beads in contemporary Indian sites, practically none have been found in the excavations at the settlement. On the

[3] This has been designated the Blue Rock green type.

[4] Chevron beads also characterize the early Spanish period in Florida, and we suspect that they were among the earliest trade beads in the Northeast. They have not chanced to turn up among the small samples available in sites from the first stage in the fur trade.

other hand, the pottery tableware and clay pipes so conspicuous at Jamestown are barely present in nearby Indian villages. Curiously, some of the pewter objects found in seventeenth-century Indian sites have no parallels in either the Colonial settlements or in the collections of Europe.

There is an abundance of data from Iroquois and Susquehanna sites of this stage. The first brass kettles appear in graves. The Seneca had ceased to use stone ax blades, being entirely supplied with steel ones, whereas half of the Susquehanna ax, adz, and hoe blades were of stone, half of steel. Steel knives had entirely replaced flint. Many arrowheads were cut from brass, but flint tips predominated. A few lead bullets and shot occur, but no firearm fragments have yet been found. Shell wampum of the type used in treaty belts appears for the first time, along with earlier types of shell beads. Hoof-handle brass spoons, tiny brass pipes (made for use with hemp?), sabers, bottle glass, and fragments of European white clay pipes are found occasionally. Cannel coal and catlinite beads indicate contacts with the Ohio, as do potsherds from the Fort Ancient cultures.

Glass beads occur in profusion and variety. They are concentrated in graves but are also broadcast throughout the village sites. The majority of the beads are of a type or series of types which we have called "early blue."[5] This bead type is found as a tiny minority in sites from the first and second stages of the trade and in sites as late as 1650; it may have been in existence at the time of the earliest trade, but it is overwhelmingly abundant just before and after 1600. It is a small, spherical to oval, sky blue bead of weak glass, filled with capillary bubble holes and strains parallel to the hole. It weathers and etches very badly in alkaline soil, and it is normally so weak and damaged that it is not recovered from sites dug over by the pot hunter. Many examples have longitudinal stripes in white. Despite the long period over which this type appears, it is a good, sensitive dating device. When it is predominant — even in a small sample — the date is close to 1600.

Practically all of the other bead types of this stage are spherical or subspherical, with almost no cylindrical or tubular examples. All have dull surfaces, none of them being coated with transparent clear glass, as are the beads of the next stage.

The five Indian confederacies which controlled the fur trade along the eastern margin of the continent sat like robber barons upon the trading paths, the hunting grounds to the west, and the coastal trading points. Little beaver was traded from any other tribes at the ports, few trade goods passed beyond the confederacies, and many interior tribes were exterminated or decimated by raids for fur. The scant trade goods that do appear in the interior provide a terminal date for major protohistoric cultures there.

Apparently only the early blue — the commonest and cheapest bead type — was passed on into the interior by the native fur trade.[6] The only other European goods known from western sites of this age are brass cones and outline figures of salamanders and catfish, made of sheet brass and found in infants' graves with early blue beads. Identical brass figures of water dogs (mud puppies) and fish are otherwise known only in Siouxan sites of the central Roanoke Valley, suggesting that there were trade contacts with peoples of the Carolina piedmont over the great trading path between Virginia and the Ohio. The presence

[5] Examples found in Florida have been described as "Estaufa blue"; collectors erroneously call it "Jamestown blue."

[6] The only glass beads which I know of from the Keyser complex of western Virginia, the Clover complex of the West Virginia panhandle, the Monongahela Woodland of southwestern Pennsylvania, and the Madisonville complex of central Ohio are the early blue type. Unfortunately these sites have received little respectable excavation and have been torn apart by collectors. Few of the beads have been saved or preserved, because they are usually found in so strained and eroded a state that they are shattered in the ground or in the fingers of the collector. The early blue bead may be widespread and unrecorded in many other areas, since archaeological pot hunting has had so notorious a history in the Midwest.

of early blue beads in some numbers, with the absence of other types, places the death date for the Fort Ancient cultures very shortly after 1600.

THE FOURTH STAGE, marked by the first appearance of firearms in northeastern sites, is usually merged into sites with a longer occupation and can only be segregated through study of grave-lot association. However, one Seneca site near Rochester Junction, New York, was occupied for just the proper interval to define this stage. It is believed to date from about 1630.

The guns are mainly primitive or transitional flintlock mechanisms: snaphaunces, dog locks, and Jacobean locks. The sudden abundance of firearms, coincident with the early period of invention in firelock mechanisms, speaks eloquently about the economic importance of the fur trade. Rochester Junction was far better armed than Jamestown. Susquehanna communities of the same age are equally well supplied with guns, marking the beginning of a new era in Indian warfare.

Beads of this stage are distinctive. Most of them are small spherical and seed beads in a wide variety of colors, most of them monochrome. They are coated with a thin layer of crystal clear glass, giving them a brilliance unequaled in any other stage. Beads shaped like a grain of maize and made of brilliant transparent yellow and green crown glass, and seed beads of the same glass are common, but they are generally deeply corroded, with an opaque white chalky surface. Large spherical dull black beads with spirals and guilloches enameled in yellow or white are another distinctive type limited to this stage.

Sites of 1640–60 are sharply delimited as a stage among the Seneca, but the Susquehanna towns had a longer time range, and there the fifth stage can be separated only through the analysis of grave lots. Guns were abundant, arrowheads scarcely present; native pottery was obsolescent, brass kettles in normal use. Seal-handle spoons, apostle-handle knives, rapiers, daggers, plate armor, specialized carpenter's and other craft tools, and the first Dutch pottery pipes appear. Wampum belts occur as grave offerings, and wampum beads are more abundant than at any other time. Extended burials begin to occur, reflecting changes in sleeping posture that came with the use of woolen clothing and bedding. Objects made of tin plate are noted for the first time — doubtless from the shops of Saxony.

Glass beads are found in huge quantities. Most of them are cylindrical, the size and shape of belt wampum, in a variety of colors and stripings. A few polychrome spherical beads of the "Venetian" type occur, and the only necklaces made up entirely of this type come from sites of this age. The most spectacular bead type of all, a chevron bead the size of a pullet egg, is found only at this stage, but it is mainly represented by broken fragments scattered on village sites.

The sixth and last stage in great native wealth, and the stage of complete decadence in native crafts in the Northeast, was from 1660 to 1700. Except for beads, trade goods are eccentric; we even have a French pewter chamber pot from a Susquehanna grave, a refinement which could scarcely have been found in Baltimore or New York at this time. Long pewter pipes with animal and human figures perched on the front rim of the bowl are ordinary; no European records or parallels are known.

Glass beads are monotonous and without interest; practically every one is a pea-sized and pea-shaped mass of monochrome dull black glass or Indian-red glass, with a few green equivalents. Seed beads of the same glasses are common but have usually been lost in digging graves of this period. Practically no beads of any other type are found.

Discs cut from broken delft plates are found in Indian sites of this age. Similar discs from Colonial white sites, such as Brunswick Town, North Carolina, are interpreted as checkers. Since there are no European dishes in the Indian sites of the same age, the discs probably were gaming pieces

made in white settlements. Bottles occur for the first time in abundance in the Susquehanna sites. Some are Rhenish stoneware jugs, others are square glass case bottles. However, every site produces a few unique items, unknown in the surviving collections of Europe and not previously found in the course of excavation. A few decanters of Venetian glass, odd pieces of pewter, and some peculiar steel tools and weapons represent types not otherwise known.

MAJOR EVENTS in the Northeast had run their course long before 1700. The Huron tribe had been destroyed by the Iroquois in 1648. Thus the Huron sites provide us with a good cutoff date for certain types of trade goods. After 1648, the Iroquois dominated the northern trade routes over the French River to the west, and held the Missisauga, the Amikwa, and the Chippewa subject as canoemen in the trade across the northern rivers and lakes. War with the Susquehanna for control of more southerly routes to the interior was intensified.

The Iroquois nearly exterminated the Susquehanna in 1675, thus providing us with another secure cutoff date for several kinds of trade goods. The Seneca, dominant in the Iroquois confederacy, were next doomed. In 1687 a French army of voyageurs, adventurers, and Christian Indians under the Marquis de Denonville fell upon the Seneca country. They burned every Seneca community and killed many of the people. The towns burned by Denonville have been identified in the ground and are our major anchor point for seriations within the historic Seneca sites. From 1675 until the close of the American Revolution, Seneca remnants were engaged in bitter warfare with the Cherokee and Catawba of the Carolinas and with the Miami of western Ohio. But the no man's land had become so broad that conclusive victories were impossible, and only raids for murder could be accomplished.

Beaver was the great fur in early Colonial commerce. Two features account for its value. The first was Indian labor: Indians plucked out the guard hairs, which made the pelt differ from shorn beaver in that the stiff long hairs had been completely removed rather than cut off at the level of the soft underfur. Tanning and plucking beaver meant many days of work by Indian women, and women had much to say in the negotiations of the trade.

Even more important was the existence of a unique market. American beaver was not used in Europe at this time but went to the fur auctions in Moscow, from which it was transshipped to unidentified Oriental markets. American beaver was in little demand among hatters in the early period, since European beaver — until its extinction — was the preferred material for felting into hats.

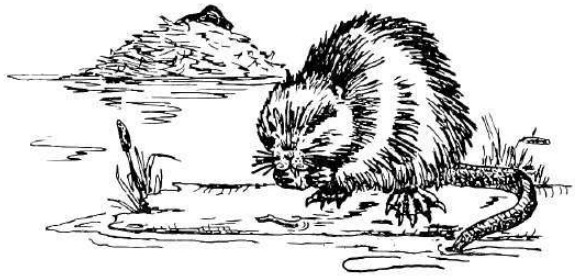
Pennsylvania Indians traveling to coastal ports in 1675 received a rude awakening on the eve of their death at Seneca and Cayuga hands. Beaver was suddenly worth much less. The Oriental market had collapsed, and the only remaining demand was from hatters, who bought American beaver as a poor substitute for the beaver of Europe. The great age of American Indian wealth had ended forever.

After 1700 guns were rarely placed in graves, and all trade goods were less abundant. Sites are smaller, and total populations were vastly reduced. The most distinctive bead types of this stage are large, translucent, spherical or polyhedral forms which were made by spinning a band of molten glass upon a spindle or wire. Some are spheres of milk glass, opalescent, white from air bubbles whipped into the molten glass. Others were faceted by strokes of a flat or floral-carved paddle. A variety of tubular and wampum-shaped beads occurs in bright colors; they often show striations from having been drawn through a die before they were cut into segments. Die-drawing of beads was apparently a new technique in the glass industry of the early 1700s.

Quartz beads are a scant but characteristic feature in sites of this age. They were made in India and were cut from rock crys-

tal, sard, and carnelian. Bottle fragments are abundant. Pots or buckets of tin plate had largely replaced the more expensive brass kettles. Small triangles of blue and white agate glass (faked agate), sawed to shape and perforated at one corner, were worn suspended from a hole in the septum of the nose. Minnesota catlinite, worked into beads, pendants, and calumets, also occurs in some abundance for the first time.

Eastern sites of the Seneca, Delawares, Conoy, Shawnee, and others contain beads from the 1700–50 interval intermixed with all the bead types of 1630–90. In cemeteries of the earlier sites from 25 to 90 per cent of the graves have been looted, but only beads and wampum have been removed. Some were disturbed when the bodies were still partly articulated, for bones are scattered on the grave bottom, not mixed into the fill. Thus the grave cover had been intact enough so that the whole burial could be removed without dissecting away the soil. Often a leaf-mold lens in the depression at the top of the grave fill indicates that it was looted before the site was first plowed. Thus the evidence is clear that as their prosperity declined the eastern tribes were reduced to the expedient of digging the graves of their grandfathers for wampum.



TO THE ARCHAEOLOGISTS sifting the soil of Indian graves and village sites, the fur trade appears with two distinct facets. Its history is part of the development of European technology and commerce; it is also a chapter in the story of American Indian cultures. Our studies of the successive stages in the growth of the fur trade and of the object contents of each contribute to both areas of knowledge. The European framework is that of technical advance, economic expansion, and the evolution of craft guild, shop factory, and factory. The Indian context is that of technological decay, social disintegration, and dependency.

In our growing picture of the Indian and white history of Colonial and Federal times, more emphasis is being placed on the archaeology of Indian sites. Those from the earliest stage call for greater study, and many areas, such as the Deep South and the Canadian Seaboard, have scarcely been touched. The need is critical, for the vandalistic collector is destroying sites neglected by the student.