

EUROPEAN AND ABORIGINAL TRADE BEADS

(DISCOVERED AT THE THOROLD SITE, ST. CATHARINES).

1979

Helena Klimko .
770 4790
Anth 3K3
Dr. Noble

Different types of beads have been found throughout the known sites of the Neutral Indians. The Thorold Neutral Indian Site, located on the outskirts of St. Catharines, dating around 1625, is no exception. The focus of this paper will relate to European glass trade beads and the aboriginal trade beads (excluding shell beads) discovered at the Thorold Site.

Although now a distinct group, the Neutral Indians extended over most of Southwestern Ontario, from the Niagara area in the east to the Detroit River and Lake St. Clair on the west. Their villages also reached northward to the watershed of the Thames valley and the upper area of the Grand River. (Tait, 1971: 73; Emerson, 1954: 31) However, the Neutral Indians primarily lived around the northwestern end of Lake Ontario, especially around the Niagara escarpment. (Noble, 1977: 1 and 6)

Samuel de Champlain, a French explorer, named these Indians "la nation neutre", the nation of the Neutrals. (Noble, 1977: 2) This name was appropriate, for the Neutral Indians avoided any involvement in the wars between the more north orientated Hurons, and the Iroquois Nations to the south and east, especially since all three tribes were once united. (Noble, 1977: 2; Tait, 1971: 72 and 94) The situation, on how this united tribe separated, arose in the following manner:

"...We have every reason to believe that not long ago they all made but one people, both Hurons and Iroquois, and those of the Neutral Nation; and that they came from one and the same family or from a few old stocks which formerly landed on the coasts of these regions. But it is probable that, in progress of time, they have become removed and separated from one another, in abode, in interests, and in affection; so that some become enemies, some Neutral and others remained in some more special connection and communication."

(Tait, 1971: 94)

The above statement was made by Father Hierosme Lalemant, in 1640, in a speech to his superiors in France about the Neutral Indians. References to his speech were also supplied by Brébeuf and other priests. (Tait, 1971: 94)

Early explorers around the world found glass beads so prevalent among the aborigines of the lands in which they traveled, that an industry manufacturing glass beads was established in Venice in the fourteenth century. The Indians of North America were no different for they valued the beads which were traded to them. This value for beads was the means through which the beads aestheticism was expressed. This value for beads was also developed into an art which has nowhere been exceeded by other aboriginal groups. (Orchard, 1929: 82)

The manufacturing of glass beads had consisted of two principle methods: (1) the hollow-cane (drawn) method and (2) the mandrel-wound (wire-wound) method. (Stone, 1974: 88) These two methods will be presented in the following paragraphs.

In the manufacturing of the drawn beads (hollow-cane) a long tube was drawn out from a hollow globe of molten glass by two men. (Karklins, 1971: 69) The first individual accumulated

a small amount of molten glass on the end of his blowing rod. By blowing into the rod, the molten glass enlarged into a bubble state. Another iron rod than had to be attached to the end of the molten mass by the second man. Both men then moved in opposite directions until the glass became cool and could not be drawn out further. (Kidd, 1970: 48) The tubes were then laid down on slabs of wood to harden. Once hardened, they were broken or cut into smaller pieces. These glass segments were then tumbled with a mixture of sand and ash. The sand and ash acted as a filler which prevented the hollow tube from collapsing upon heating. The segments then required retumbling in the same mixture but with the addition of heat. The abrasive action of the sand and ash combined with heat decreased the sharpness of the segments' ends which could result in rounded and polished beads. (Stone, 1974: 88) However, the shape of the bead depended on the period of time left in the mixture. The beads ranged from practically unaltered tube fragments (bugle beads) to almost perfect spheroids. (Karklins, 1971: 69) This gave a simple rounded tube bead or monochrome glass bead. (Kidd, 1970: 49)

Prior to the drawing, additional layers of glass or colour glass rods may be attached to the molten mass. The layers were either added by inserting or rolling the molten mass into different mixtures of semi-molten glass. If coloured-glass rods had been added a stripe effect after drawing was produced. If the drawing rods had been twisted during the process the coloured glass insets would have a wound effect. (Stone, 1974: 88; Kidd,

1970: 49) Martha and Kenneth Kidd, authors of the book, Canadian Historic Sites, identified this process of adding different colours as "layering". They likewise acknowledged that most glass beads which had "layering" ranged from two to six different layers making it a more complex rounded tube bead or a polychrome glass bead. (Kidd, 1970: 49)

In the colour-glass rod process, the rods were around the inside wall of the container. The bubble was then inserted into the center of the container and expanded until the bubble clung to the rods. Next, it would be re-introduced to the furnace for just the right length of time to cause the rods to unite with the surface of the bubble, but not to lose its form. The bubble would then be drawn as done by the simple rounded tube bead method. (Kidd, 1970: 49)

Another polychrome process was given on a "marver" or board which sometimes was corrugated. Generally when a bubble was rolled on this corrugated marver it was also layered in glass of another colour. This process was repeated until the bubble had five to six layers and in some cases up to twelve. Once the layers were built up, it was then drawn. Thus, the end product resulted in a bead known as the rosetta, the star or the chevron. (Kidd, 1970: 49)

The second method of manufacturing glass beads was the mandrel or wire-wound method. The initial manufacturing of this bead was similar to the hollow-cane method. One exception, though, was that a pocket of air was not introduced into the molten glass mass. As in the previous method, the solid

mass was drawn and allowed to harden. It was then broken into segments for later reheating and forming. The following step was performed with a glass-blowing lamp. A short rod segment was heated and wound around either a copper or iron rod forming the shape of a bead. Once cooled, individual beads were removed from the rod and were then tumbled in the way described in the hollow-cane method. Small circular striations generally occurred, on these mandrel-wound glass beads. (Stone, 1974: 88)

During the Early Historic period of 1600 to 1650 the major glass trade beads, in the sites of Southern Ontario, were the large tubular or bugle beads, star or chevron beads, and beads with vertical stripes of two colours. Usually, the colours tended to be dull brick-red or blue. A common style was the basic dull brick-red inlaid with white stripes in which was centered a blue stripe. However, during this time the "queen" of beads was the chevron or star bead. The chevron beads were manufactured with various concentric layers of coloured glass, which consisted of alternate layers of deep blue, brick-red, white, and sometimes other colours such as turquoise. When the end of the chevron bead was ground into a curved surface, the coloured bands produced a star or chevron-like pattern. (Quimby, 1966: 83-84)

In St. Catharines, the Thorold Site was no exception for it contained these major glass trade beads as did the other sites in Southern Ontario. The Thorold Site also contained a variety of other beads such as the football type. Of these beads which were available for analysis, seventeen were com-

plete beads and two were fragments of beads. These beads were all manufactured by the hollow-cane method. If enough of a specific bead was present to determine its original orifice, diameter and construction, it was considered "complete", for example in Table 1 numbers 5 and 12, and in Table 2 numbers 2, 4, 6 and 7. A bead that was considered to be a fragment had either, or both the orifice and diameter estimated. Thus, a plus sign by the number indicates that the bead dimension(s) were greater than what were measured, such as numbers 1 and 5 in Table 2.

The classification of the glass trade beads recovered during the Thorold Site Excavation was based upon that used by Kidd and Kidd (1970). In some instances Ian Kenyon's classification of glass beads (1969) were also used, nevertheless, it has been mentioned only briefly in the column of remarks. The attributes described in Tables 1 and 2 include: location (where the beads were found at the Thorold Site); Kidd's classification, size, shape, number of layers, colour(s), type of glass; and final remarks about the glass bead. However, in Table 2 the layers have been described individually, stating their colour and type of glass. The glass beads in Table 2 included only the chevron beads while Table 1 contained the remainder of glass beads found at the Thorold Site.

TABLE 1: GLASS BEADS

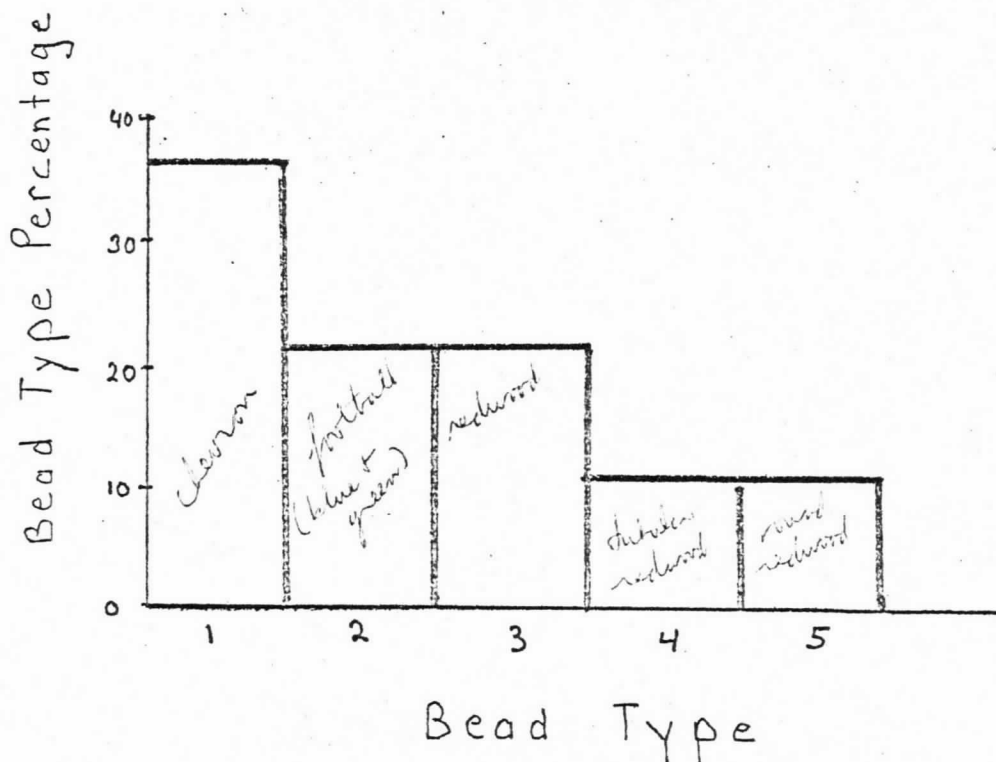
Location		Kidd's Classi- fication	C	Size D	TS	Shape	Lay- er(s)	Colour	Type of Glass	Remarks
1.	Th M2 S	IIa	8	5	L	C	1	Dark Palm Green	tr	-more turquoise than dark palm green II
2.	Th S	IIa	8.5	4.5	L	C	1	Dark Shadow Blue	tr	-*cobalt blue II 49
3.	Th S	IIa	8.5	4	L	C	1	Brite Navy	tr	-*cobalt blue -a flattened oval II 57
4.	Th S	IIa	6	5	M	R	1	Dark Shadow Blue	tr	-*cobalt blue II 49
5.	Th M3 Sq21	Ia	9	6.5	L	T	1	Redwood	Cp	-*brick red Ial
6.	Th H1 F12	IVa1	6	7.5	L	R	2	Redwood-core is black	Cp	
7.	Th H1 F12	IVb3	3.5	3.5	S	R	2	Redwood-core is black (nar- row white stripes)	Cp	-slight twist -narrow stripe
8.	Th H3	Ib2	7.5	6.5	L	T	1	Redwood (white stripes)	Cp	-slightly grounded
9.	Th M8 S4	IIbb2	9	6.5	L	T	1	Redwood-3' brite navy on white	Cp	-narrow stripe in center is weathered therefore I suspect it was blue.
10.	Th H1 F12	IIbb2	13	10	VL	T	1	Redwood 3 brite navy on white	Cp	-lip (could be double dipped)
11.	Th M3 Sq25	IIbb2	5.5	8.5	L	C	1	Redwood 3 brite navy on white	Cp	-it has been altered by time or by fire
12.	Th M8 Sq31	IIIbb1	15	8	VL	T	2	Redwood-core black-3 opaque black on white	Cp	

TABLE 2: CHEROKEE BEADS

[illegible]

For the nineteen beads, a histogram was constructed to illustrate the percentages of different bead types. Hence, five basic bead types were formed: (1) the chevron, (2) the football (blue and green), (3) the redwood, with three, dark in white stripes (dark stripe either black or blue), (4) the tubular redwood, and (5) the round redwood with a dark core (one bead also contained white stripes). These five types have been arranged in order of decreasing magnitude.

BEAD TYPE PERCENTAGES FOR
THOROLD SITE



As illustrated in the histogram the "queen" of beads, the Chevron type, were the leading beads at the Thorold Site with a percentage of 36.8. Hence, these beads were probably most

favored by the Neutral Indians at the Thorold Site. The second preferred beads with a percentage of 21.1 were the football type and the redwoods with three dark in white stripes. Finally the bead types of the tubular redwood and the round redwood with a dark core had a percentage of 10.5.

With regards to approximate time period of the Thorold Site (1625), various sites in the vicinity of Thorold will thus be consulted for their contents of glass beads. These neighbouring sites, Christianson or Shaver Ossuary (1620), Port Colborne (1625), St. Davids or Burke Ossuary (1630), Walker (1640), Sealy (1640) and Hamilton (1650), may have similar resemblances between them and the Thorold Site. Yet styles have changed through time as it with clothes, beads, pottery, etcetera. Therefore, one may expect differences of bead types to have occurred between these Neutral sites.

The Christianson or Shaver Ossuary contained numerous varieties of bead types. The main bead type recovered at this site was the 123 white tubular beads. The Thorold Site contained no such bead. However, the beads at the Christianson Site, that were similar to the Thorold Site, were the chevron and the redwood with three dark in white stripes. (Kenyon, 1969: 15)

The most common beads recovered at the Port Colborne Site were the opaque redwood exterior beads. This bead type was similar to those found at the Thorold Site. However, at Thorold, it was not the most frequent type of bead. At the Port Colborne Site, the second customary bead type recovered was the

chevron bead which happens to be Thorold's most frequent type of bead found. (Kenyon, 1969: 17)

Containing more variety of beads compared to the Thorold Site were the Walker, Sealy, and St. David or Burke Ossuary Sites. The most frequent bead type recovered at all three sites was again the opaque redwood exterior. These sites, furthermore, contained similar types of beads as Thorold, such as the cobalt blue and the chevron. In addition, at the Walker and Sealy Sites, the redwood with three, dark in white stripes also occurred. However, the second most standard bead recovered at the three sites, in which the Thorold Site did not contain, was the translucent turquoise blue bead. (Kenyon, 1969: 17 and 23)

Finally, at the Hamilton Site the most common type of bead was the opaque redwood with a dark core. This bead type was likewise recovered at the Thorold Site. The chevron type, although less numerous than the opaque redwood exterior type, were also both found at the Hamilton Site. These two bead types were, as well, common at the Thorold Site. However, at the Hamilton Site, the translucent turquoise blue was again frequently found and did not appear at the Thorold Site. (Kenyon, 1969: 23)

The lithic trade beads or aboriginal trade beads recovered at the Thorold Site were few. The lithic beads available for analysis contained one complete and one fragmentary bead. The attributes for these lithic beads included: location (where the beads were found at the Thorold Site), size, shape, and type of rock.

TABLE 3: LITHIC BEADS

	Location	Size		Shape	Type of Rock	Remarks
		C	D			
1.	Th S	3.9*	10	T	catlinite	-rounded edge but tubular
2.	Th H2	7.5	8	T	catlinite	

In Southwestern Ontario the Neutral Sites carried a major lithic bead known as steatite. (Noble, 1977: 13) Steatite can be defined as a compact, massive, fine-grained, fairly homogeneous rock consisting primarily of talc but which usually contains other materials as well. It has likewise been defined as an impure, talc-rich rock known as soapstone. (Campbell, 1972: 690) Thus, a soapstone rock can be defined as

"a metamorphic rock of massive schistose, or interlaced fibrous texture and soft, unctuous feel, composed essentially of talc with varying amounts of micas, chlorite, amphibole, pyroxines etc. and derived from alteration of ferromagnesian silicate minerals."

(Campbell, 1972: 670)

Another major lithic bead, catlinite, has likewise been recovered in Ontario's Neutral Sites. Catlinite, a red siliceous (red muddy sandstone) hard clay from the upper Missouri River valley region was the type of bead found at Thorold. (Campbell, 1972: 111) Dr. B.J. Burley, a geologist from McMaster University, identified the two lithic beads from Thorold as catlinite. Furthermore, Dr. Burley stated that these beads were iron oxidized and polished probably by another stone.

Trading for the Neutral Indians played an important role in their life. There were three major trade networks, in which the

Neutrals stood at an important center position at the ends of these networks. (Noble, 1977: 13) These three networks will be discussed in the following paragraphs.

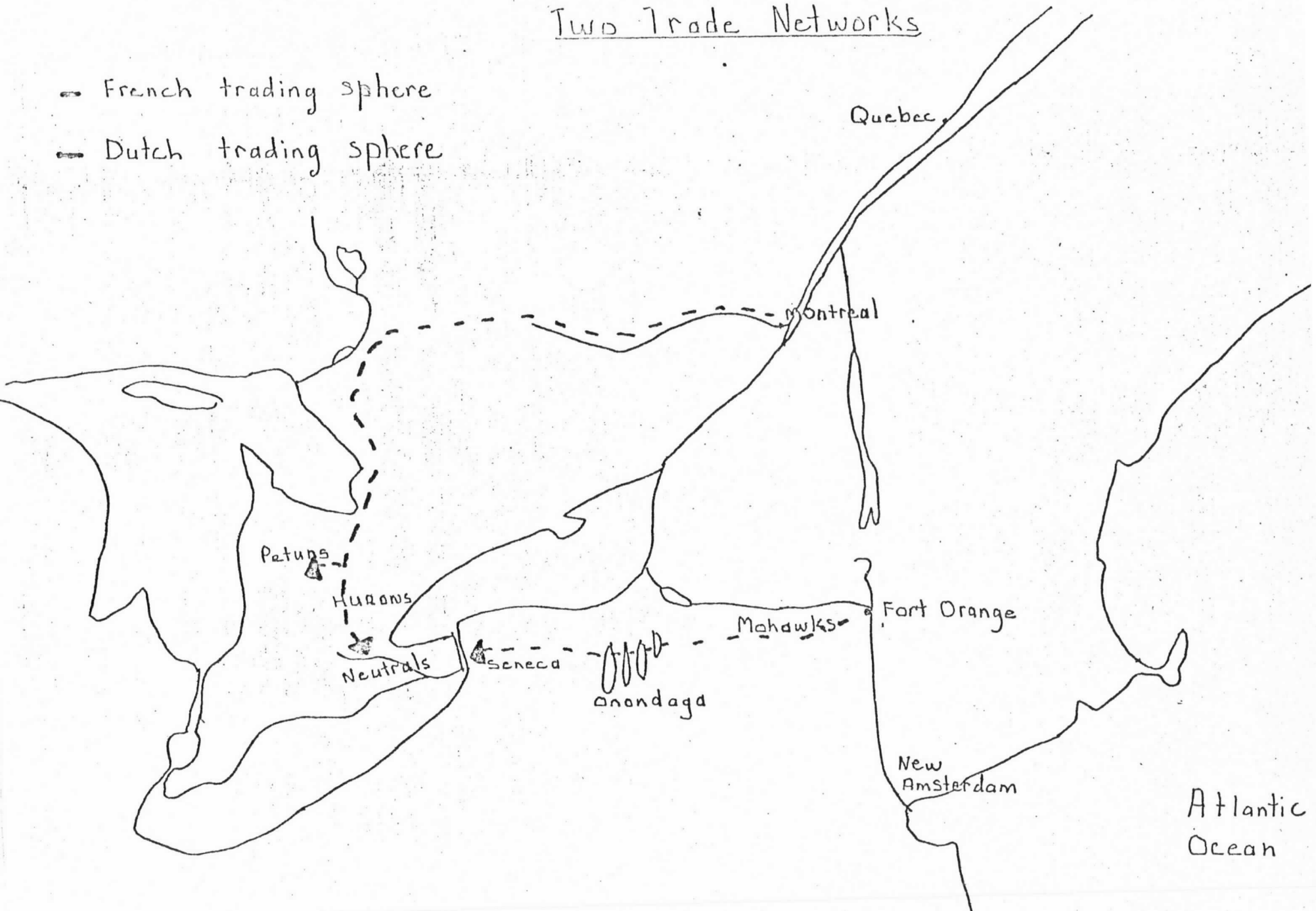
The first major trade route consisted between the French, Hurons, Petuns, and Neutrals. This was the most important source for exchanging trade goods for the Ontario Iroquois. The Hurons acted as the middlemen. They either travelled to Montreal or the French travelled to them and later traded these goods, such as the European glass beads, to the Petuns and Neutrals. (Kenyon, 1969: 27)

The second trade route involved the Dutch and the Five Iroquois Nations across the Niagara River. The Iroquois Nations from New York State traded at Fort Orange which was a Dutch trading post in New Netherlands (New York). Eventually, when the Iroquois travelled to Ontario, Dutch goods were traded to the Neutrals. (Kenyon, 1969: 27) For example, the round star bead was believed by Van der Sleen, to be traded by the Dutch while the tubular and faceted star beads were traded by the French. This he believes was probably due to different manufacturing techniques used in different glass industries, such as contrast in sands. (Kenyon, 1969: 30)

In the third route, the Neutrals were associated with the Wenro, Andaste and Eries who were south of Lake Erie. These three tribes formed the northern extension of the major aboriginal Ohio-Mississippi River exchange system. Thus, this exchange network led the Neutrals to obtain the steatite and catlinite beads as well as marine shell beads. (Noble, 1977: 13)

Two Trade Networks

- French trading sphere
- Dutch trading sphere



For all three exchange networks, the Neutrals traded a variety of items. Tobacco, furs, foodstuffs, and finished cloth items were among the products grown/made for trading purposes. (Noble, 1977: 13)

In summation, the Thorold Neutral Indian Site was not an exception for containing European glass and aboriginal lithic trade beads. Manufacturing methods and types of glass bead recovered showed patterns similar to other Neutral Indian sites located in Southwestern Ontario. For obtaining both European and aboriginal trade beads, three major trade networks were established.

GLOSSARY OF TERMS FOR THE TABLES

Location: Th = Theroold Site

M = midden

H = house

F = feature

S = surface

Sq = square

Size: O = Orifice both in mm.

D = diameter

S = small 2-4 mm

M = medium 4-6 mm

L = large 6-10 mm

VL = very large Over 10 mm

TS = Type of Size

Shape: R = round

C = circular

O = Oval (football)

T = tube

Type of Glass: Op = Opaque

Cl = clear

tr = translucent

For Table 2: T = Type of glass

C = Colour

BIBLIOGRAPHY

- Campbell, Ian
1972 Glossary of Geology. Washington D.C.: American Geological Institute.
- Emerson, John Norman
1954 The Archaeology of the Ontario Iroquois. Chicago: The University of Chicago.
- Karklins, Karlis
1971 "Beads From the Fort at Coteau-du-Lac, Quebec", Ottawa: National Historic Parks and Sites Branch.
- Kenny, Ian
1969 Glass Beads: A Technique for Dating Historic Neutral Sites.
- Kidd, Kenneth E. and Martha A.
1970 Canadian Historic Sites, Occasional Papers in Archaeology and History-No. 1. National Historic Sites Service, National and Historic Parks Branch, Department of Indian Affairs and Northern Development. Ottawa: Maracle Press Limited.
- Noble, W.C.
1977 The Neutral Indians. Hamilton: McMaster University.
- Orchard, William C.
1929 Beads and Beadwork of the American Indians. Lancaster: Lancaster Press, Inc.
- Quimby, George Irving.
1966 Indian Culture and European Trade Goods. Milwaukee: The University of Wisconsin Press.
- Stone, Lyle M.
1974 Fort Michilimackinac 1715-1781 An Archaeological Perspective on the Revolutionary Frontier.. Michigan: Publication of the Museum Michigan State University.
- Tait, Lyl
1971 The Petuns Tobacco Indians of Canada. Ontario: Erie Publishers.
- Burley, Dr. B.J. - Interviewed at Senior Science Building, McMaster University, Hamilton, Ontario, November 7, 1979.