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A Comparison of St. Lawrence River Valley

Iroquoian Sites With The Dawson Site

Note: This paper was read by the author, on behalf of the National Museum of Canada, at the 1966 Conference on Iroquois Research, held at Sagamore, N.Y., 21-23 October. The portion of the paper regarding the Dawson site, which may or may not be that of Cartier's Hochelaga, is derived from a recently completed detailed study of that site undertaken for the National Museum of Canada by the author and a number of co-authors each writing on his particular discipline.

INTRODUCTION

The aim of this paper is to compare the excavated St. Lawrence River Valley Iroquoian sites by examining samples of what appear to be the more significant artifact traditions.

To date seven village sites and one camp site attributable to the St. Lawrence River Valley Iroquois have been excavated and reported upon in varying detail. They are as follows, proceeding from north-east to south-west on the axis of the St. Lawrence River:

Dawson, possibly the site of Cartier's Hochelaga
Berry
Gogo
Salem
Grays Creek
Beckstead
Crystal Rock
Roebuck

Ceramic data on a ninth site, Lanoraie, is set out in MacNeish's Iroquois Pottery Types (1952, p. 28). However, like Roebuck (Wintemberg, 1936 and *ibid*), the ceramic data for Lanoraie is at present only available in terms of pottery-types. Because it was elected to discuss ceramics in terms of attributes using the criteria of shape, motif, and technique (Wright n.d.) , it was necessary to exclude the Roebuck and Lanoraie sites for which these data have not yet been completed. It is hoped that this will be only a temporary nuisance for plans are in hand to compile ceramic data for these two sites in terms of attributes for comparison with the other sites.

Certainly this paper is not intended to be a definitive reconstruction of the Iroquois occupation of the area. Neither is it intended to set out a firm site seriation, although sequence has been suggested as a basis for evaluating a trait or ceramic attribute. An attempt to synthesize or

reconstruct a definitive site seriation at this time would be premature. There is but a superficial understanding of the earliest Iroquoian manifestations in the area; only a reasonable knowledge of what we assume to be middle period Iroquoian sites; and only one site, Dawson, provides the first and only look at what may be the contact period.

POTTERY

It is proposed to discuss the pottery first because of the great depth of sample studied, and the amount of information available.

DECORATIVE TECHNIQUE

An analysis of the decorative techniques from six sites for comparison with Dawson indicates that incising is by far the most popular technique with linear stamping, dentate stamping, push-pull, mixed incising and dentate stamping, and mixed incising and cordwrapped stick impressed following in that order of frequency. Comparison of the seven sites on the basis of the technique attribute places them in the following order as regards their similarity to Dawson, the contact site; the coefficients of similarity are as indicated:

Grays Creek	-	-	-	184
Salem	-	-	-	181
Beckstead	-	-	-	166
Gogo	-	-	-	165
Crystal Rock	-	-	-	146
Berry	-	-	-	92

This relationship closely approximates the seriation of the sites derived from a comparison of the whole of the trait assemblages.

The incidence of stamping is relatively high on the Berry site (58%) and the Gogo site (40%) which are believed to be the earliest Iroquoian sites in the area. With the exception of Grays Creek (31%) , the technique does not enjoy the same popularity in the middle era, Salem showing only 19% and Beckstead 11%. However, Dawson with 25% of the rim sherds decorated by a stamping technique, suggests a resurgence of stamping in the late Iroquoian period which is not yet understood.

The significance of dentate-stamping appears to be clearer. Apparently it was never a technique in general use but rather one which became popular on individual sites such as Crystal Rock (11%) and Lanoraie. However, whether this represents the resurgence of an earlier trait carried over from Middle Woodland times, or its re-discovery and flourishing on certain sites, is not clear. Its absence on Berry, the earliest known Iroquoian site in the area, and the varying small amounts on subsequent sites — Gogo 3% , Beckstead 1% , Grays Creek 5% , Salem 7% , Dawson 2% — suggests a lack of continuity that makes the latter possibility appear likely.

The push-pull technique is not common and as yet no sites are known on which it is dominant. Until Dawson, with 1.1% , was investigated, the Berry site, with 3% , provided the only representation from documented local Iroquoian sites. Its occurrence at Dawson is perplexing insofar as it is now known to exist on the earliest and latest known

Iroquoian sites in the area. At Dawson it may be attributable to a general diversification of technique akin to that which appears to have occurred as regards the attribute of shape.

COLLAR SHAPE

For the sake of comparison, rim sherd collars from the eight sites have been categorized as follows ; the incidence of these shapes at Dawson are as indicated :

High collared channelled	-	-	-	33 %
High collared convex	-	-	-	11 %
Short collared channelled	-	-	-	23%
Short collared convex	-	-	-	21%
Collarless channelled	-	-	-	Nil
Collarless convex	-	-	-	10%
Miscellaneous -----				4%

The dividing line between high and short collars has been arbitrarily set at 35 mm. Having applied this criterion to these eight sites it will be necessary to continue this definition in future to provide a common denominator for further comparisons.

Using this interpretation of the shape attribute, Dawson most closely resembles the other sites in the following order ; the coefficients of similarity are as indicated :

Salem -----	168
Crystal Rock -----	167
Beckstead -----	162
Grays Creek -----	149
Berry -----	141
Gogo -----	116

With the exception of Crystal Rock, this order approximates that derived from the technique attribute and the assemblage of traits. It also bears out the sensitivity of the shape attribute to time.

The salient conclusions arising from the analysis of rim-herd shapes are as follows:

- a. On all sites, hence on all time levels, high channelled collars are much more popular than high convex collars.
- b. Both high channelled and convex collars increase in relative popularity in the early to late sequence.
- c. Short collared pots are relatively stable in all known time periods with the possibility of the convex form tending to be less popular in earlier times.
- d. Collarless channelled rims are an early manifestation which do not survive the middle Iroquoian era.
- e. Collarless convex rims generally decrease in popularity in an early to late sequence.

- f. Early and late sites appear to be more apt to proliferate "non-standard" rim shapes than middle period sites.

DECORATIVE MOTIF

Finally there is the rim sherd attribute of motif. Seven decorative motifs predominate in the Dawson site rim sherd sample. They occur in the following order of frequency:

Left oblique -----	19%
Horizontal -----	17%
Chevrons below horizontal lines -----	17%
Chevrons between horizontal lines -----	11%
Chevrons alone -----	10%
Right oblique -----	9%
Vertical -----	7%
Corn-ear -----	5%
Criss-cross -----	2%
Chevrons above horizontal -----	1%
Corn-ear and horizontal -----	1%
Miscellaneous -----	3%

On the basis of motif, Dawson most resembles the other sites in the following order ; the co-efficients of similarity are as indicated:

Grays Creek	164
Berry	149
Salem -	146
Gogo	136
Beckstead	108
Crystal Rock	104

This sequence is at considerable variance with the sequence arrived at on the basis of the technique and shape attributes and the assemblages of traits. Therefore, it is suggested that, at present, motifs alone do not provide a satisfactory basis on which to base site comparisons.

Co-efficients of similarity computed on the basis of all three attributes ; shape, motif, and technique; indicate Dawson resembles the other sites in the following order ; the co-efficients of similarity are as indicated:

Grays Creek -----	166
Salem -----	165
Beckstead -----	145
Crystal Rock -----	139
Gogo -----	139
Berry -----	127

Having completed the analysis of rim sherds using the attribute method, similarity was computed using the pottery-type method for comparison. Unfortunately it was not possible to include the Berry and Gogo sites in this comparison. Very few of the rim sherds from these two early sites met sufficient of the requirements necessary to fit them into the types proposed by MacNeish (1952). Some sherds resembled MacNeish's

types but fell significantly short in one or more criteria. Others had never been encountered before so, to avoid the further proliferation of local types, all rim sherds were described in terms of attributes (Pendergast 1964, 1966 a). However, on the basis of pottery-type, the remaining four sites resemble Dawson in the following order ; the coefficients of similarity are as shown:

Salem -----	148
Grays Creek -----	126
Beckstead -----	115
Crystal Rock -----	75

With the exception that Salem and Grays Creek are transposed, the list is the same as that derived from the attribute method when all three attributes are considered.

Taking a negative point of view, it might therefore be claimed that the attribute method offers no advantages over the pottery-type method of analysis.

To the contrary it is suggested that the similarity of results in this case may be because one observer, using the same bias and the same criterion for lumping marginal sherds into type classifications, intentionally or unintentionally provided the pottery-type method of analysis with the stability it does not usually enjoy when classification is done by a number of individuals who are not in close and continuous communication. It is, in part, this individual subjectivity which makes it difficult to discuss pottery in terms of types. In seeking definition as regards local variants and idiosyncrasies, the pottery-type method encourages the sometimes unwarranted poliferation of pottery types, or conversely, it fosters the tendency to force marginal specimens into acknowledged type categories.

The attribute system on the other hand involves less subjectivity. It deals with single and discreet attributes each inherently more readily recognized than the two-way or three-way combination of attributes which must be present, and the degree to which they must be present, to constitute a pottery type. However, it remains to be seen whether this rationale is validated in practice by a number of archaeologists analysing the same pottery sample, in isolation, using the attribute method.

LADDER PLAIT DECORATION

Ritchie (1952, p. 17) noted the significance of the "ladder plait" decoration on Chance Horizon pottery. Subsequently its existance on St. Lawrence Iroquois sites has been examined to determine its significance in that area.

The Dawson site rim sherd sample contains significantly fewer collars decorated with the ladder-plait decoration, 5% , than does Beckstead with 12 , Salem with 11%, or Grays Creek with 8% . However it contains slightly more such decorated sherds than does Berry with 4.7% , and significantly more than Gogo with 1.2%. It would appear, therefore, that this trait flourished in middle Beckstead and Salem times but was not popular in early Iroquois and contact times in this area.

Whether the decoration originated on the Mohawk Valley and diffused northward to the St. Lawrence (Ritchie, 1952), or vice versa, or whether

a yet unknown centre influenced both the Mohawk and St. Lawrence areas is not yet clear.

STAMPED LOW COLLARED AND COLLARLESS RIM SHERDS

Wintemberg (1926) commented upon the everted collarless rims in the McGill University McCord Museum and Chateau Ramezay collections of Dawson site material stating that he regarded them as, "the primal type of Iroquois pottery". Later in his report on the Roebuck site (1936, p. 36, 123), he noted the existence of collarless pots with flared lips in the sample from that site. At that time he called it the "Third Type" and again suggested the possibility that it represented the survival of an earlier stage in the evolution of Iroquoian collared pots. The occurrence of a considerable quantity of this type of pottery on the Salem site therefore gave rise to the use of the trait as a time marker in eastern Ontario (Pendergast, 1966b).

To the point of its incidence on the Dawson site being computed, this hypothesis has stood up well. However the 19% in the Dawson sample reverses the trend and casts at least some suspicion on the validity of the hypothesis. On the basis of this trait alone the unlikely conclusion arises that Dawson is earlier than Grays Creek with 17%, Salem with 15%, Beckstead with 13%, and Roebuck with 8%. Because this conclusion almost reverses the order derived from other data, it remains to test the hypothesis on site samples less subjective than that from Dawson to determine whether the discrepancy lies in the subjectivity of the Dawson sample or the concept. At present it is the author's opinion that the fault lies with the subjectivity of the Dawson site sample.

RIM SHERD LIP DECORATIONS

The incidence of lip decoration on Dawson site rim sherds, 41%, is higher than that which occurred at Salem, 35%; Grays Creek, 16% and Beckstead, 17%. Until this situation arose, there was a distinct possibility that the relative frequency of lip decoration would serve as a time marker premised on the supposition that the characteristic was an early trait which decreased in popularity in an early to late sequence. At Berry, the earliest of the sites, lip decorations occurred on 74% of the rim sherds. At Gogo, the next earliest site, 52% were decorated. The reversal of the trend presented by Dawson is not understood and the trait will have to be tested further for clarification.

SHOULDER SHERDS

Sixty-eight percent of the shoulder sherds in the Dawson site collections are carinated. This exceeds by a considerable margin the incidence of carinated shoulder sherds in the samples from the other sites; Gogo has 18%; *Berry*, 31%; Grays Creek, 37%; Beckstead, 52%, and Salem 56%. Statistics available regarding the incidence of this trait at Roebuck (Emerson, 1954, p. 85) are based on pots rather than sherds, hence are inclined to be a non-sequitur in this context.

However, Emerson's suggestion (1954, p. 85) that carinated shoulders are a late trait appears to be substantiated. In fact, the incidence of carinated shoulders is fast becoming the most reliable ready-reckoner for arriving at the place occupied by a site in the St. Lawrence River

Valley Iroquoian sequence. Experience to date has shown that generally the higher the incidence of carinated shoulders, the later the site.

PIPES

The most significant generality regarding Dawson site pipes is the fact that 28% fall into Emerson's late categories (1954, pp. 45-64). With the exception of Roebuck, for which there is yet no statistical analysis of pipe types available, the site with the next highest incidence of late pipe types is Salem which has only 2 in the late category. On this basis it is clear that Dawson is, with the possible exception of Roebuck, the latest of the Iroquoian sites in the area.

Six of the pipes in the Dawson sample are Emerson's late Cornet Trumpet type which he considers to have been elaborately developed by the Petun-Huron (Emerson, 1954, p. 59). Ridley (1952, p. 201) supports this view, stating that they are very common on contact Huron sites. This is their first occurrence on an Iroquoian site in Eastern Ontario east of the Rideau Canal. Together with the incidence of Huron pottery, this characteristic strongly suggests liaison between the Iroquois of Dawson and the Huron in the late, or contact era. The incidence of Cornet Trumpet pipes on sites may prove to be a significant basis for differentiating sites in the area, but their full significance is not yet clear.

A corollary to the occurrence of Cornet Trumpet pipes is the presence of pipe stems which join the bowl in a long arc, giving the general impression of the pipe being a long, bowed, piece of rope flared to a squared end. Heretofore most pipes in this area have had the stem and bowl joining to form obtuse or right angles.

It remains to be seen whether pipe samples from Iroquoian sites in this area will be sufficiently large to provide the statistical depth required to propose a site seriation on the basis of pipe types. This comment is not intended to question the validity of such an approach. Rather it is to note the paucity of pipes from sites in the area and the difficulties which arise when comparative analysis is based on a small pipe sample. However, it appears pipes will continue to serve as an excellent indication of influence from areas where certain pipe types have been proven to have temporal, spatial, and tribal affiliation. In the case of the Dawson site, they suggest considerable influence from the Huron and probably the Onondaga of New York State. The trumpet pipe, particularly the variety with a plait of horizontal or oblique lines on the side of the bowl remote from the smoker, has yet to prove its value in this regard because it appears to be an almost universal local Iroquoian trait in all time periods.

CLAY BEADS

The most interesting characteristic of the discoidal clay bead sample is the fact that the majority of the beads are decorated along the edge with fingernail impressions, giving the bead a rouletted or milled-edge appearance. Wintemberg (1936, p. 63) has noted that similar beads occur to the west in Victoria County near Huronia. This feature, when considered together with the incidence of Cornet Trumpet pipes and Huron pottery, may be indicative of an even closer relationship between

the inhabitants of the Dawson site and the Huron than has been appreciated. However, Axelson has recently recovered a rouletted trade bead from what is likely a historic Neutral site in Southwestern Ontario. The precipitous introduction of rouletted clay beads into the St. Lawrence River Valley Iroquoian sequence at the Dawson site time level may therefore be the result of contact with Europeans.

BONE NEEDLES

It is important to differentiate between the round bone needles from the Dawson site which have a very small incised eye at the extreme end and the common flat aboriginal so-called netting needles which have the eye in a more or less mid-way position. The items from the Dawson site are unlike any of the latter items. Rather they are round in cross-section and, having the very small eye one or two millimeters from the end, they closely resemble the European article.

The presence of three of these needles in the Dawson sample appears to be significant. They are unique in this area and when considered in the light of the presence of European material on the site, their close resemblance to a European needle cannot help but suggest they may be derived from that article.

CONCLUSION

Generally the Dawson site fits well into the St. Lawrence River Valley Iroquoian site sequence as a late or contact site. While there can be no doubt that the Dawson ceramic sample closely resembles that from Roebuck, as both Wintemberg and MacNeish have noted, the degree of relationship is not yet clear due to the lack of statistical data on Roebuck artifacts and ceramic data in terms of attributes. However, Dawson is also akin to Salem, Grays Creek, and Beckstead in that order of similarity. Its relationship to Crystal Rock is not clear. Of all the Iroquoian sites excavated in the St. Lawrence River Valley, Dawson least resembles Gogo and Berry, the earliest known sites in the area on the basis of ceramic seriation.

Excluding the presence of European material, probably the greatest difference between Dawson and the other Iroquoian sites in the area is the significant amount of Huron influence as is suggested by the incidence of Huron pipe forms and pottery. No other excavated Iroquoian site in the area reflects as much. The significance of this Huron influence is not clear and its existence introduces a new unknown into St. Lawrence Valley Iroquoian archaeology.

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