

**WHO MADE THE PIPES?
A STUDY OF DECORATIVE MOTIFS ON
MIDDLEPORT PIPE AND POTTERY COLLECTIONS'**

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ABSTRACT

In 1966 Wright noted that incised horizontal lines above a row of punctates, "incised opposed obliques" and an "incised, complex-zoned motif" were popular decorative motifs found on the pipes of Middleport substage sites and at the Middleport site in particular (1966:63). Such motifs also appear on the pottery of the period. The authors had observed that many of the motifs which were used to decorate the Pound site pottery had also been applied to the Pound pipes. The question arose as to what extent the decorative motifs on Middleport substage pottery could also be identified on the pipes. Should the correlation be high, one would expect that, either the pottery makers and pipe makers were one and the same, or, that one of the two had influenced the decorative art of the other. It seemed probable that a comparative study of Middleport substage ceramic decorative motifs might provide some statistical evidence which would illuminate the question of who was making the pipes—the men or the women. This study provides some statistical measurement of the correlation of the pipe and pottery decorative motifs and concludes that although the same motifs do appear on both artifact classes, they reflect two or more different traditions at any one site and that these traditions are best explained by assuming the existence of female pottery makers and male pipe makers. It is further concluded that it may be useful to compare the pipe and pottery motifs within a site and to compare these motifs with the pipe and pottery motifs on other Middleport sites which are temporally and geographically related.

INTRODUCTION

Although it is acknowledged generally that the pottery was made by women, there seems to be some question about who made the ceramic pipes. In 1644 Pier'e Boucher reported that men made the pipes (1644:101); however, it should be noted that he did not specify whether he was referring to clay or stone pipes. One must bear in mind also that he was writing in 1644 not 1444. Ramsden attributes the low correlation between the pipes of two specific sites and the pottery of the same two sites, to the likelihood that men made the pipes (1975:267). Noble, on the other hand, has suggested that the women may have designed and fired the clay pipes (1968:297). Noble has further stated that pipe effigies are probably related to a man's matrilineal totem and that it is possible to trace lineage totems on pipes back to c. 1400 A.D." (1968:297).

If women were making both the ceramic pipes and the pottery, and if both tasks were viewed as requiring decorative skill, one would expect a high correlation of decorative motifs on the pipes and pots at any one site. If, on the other hand, men were making the pipes, one would have to look elsewhere for traditional influences. For example, a man's

¹ An earlier version of this paper was read by N. E. Wagner at the 1974 annual meeting of the Canadian Archaeological Association in Whitehorse.

pipes might correlate best with the motifs which appear on his mother's pottery, his mother's brothers' pipes, or with the motifs on his father's pipes. The ethnographic evidence suggests that both matrilineal and patrilineal residence were practised in the seventeenth century (Tooker, 1967:127; Trigger, 1969:56). If this plurality of residence systems existed within any given Middleport village, the issue becomes increasingly complex.

ANALYSIS

This study concentrated on the comparison of pipe and pottery decorative motifs used at the Middleport substage sites of Middleport, Pound, Perry and Nodwell. The later Iroquoian sites of Moyer and Lawson were included for comparative purposes. The pipe and pottery material from the Perry and Moyer sites was available for study at Wilfrid Laurier University as was the Pound site material which was on loan from the University of Toronto.² In addition, the Middleport and Lawson pipes were loaned by the National Museum of Man, Ottawa. Data from the Nodwell and Payne site reports were also studied.

Only the decorative motifs which appear on the exterior rims of pipe bowls and pottery vessels were considered. The motif elements were read vertically from the top of the rim. Eight categories of decorative motifs proved to be necessary to describe all of the basic elements and their combinations. The terminology developed by Ramsden to describe and analyse the decorative motifs on pottery vessel collars has been adopted generally (1975:95-109). However, for this study it proved necessary to divide Ramsden's Complex motif category into two classes. The eight categories of decorative motifs are as follows: (1) Undecorated; (2) Horizontal—incised or trailed lines or rows of punctates; (3) Simple—vertical or oblique lines; (4) Opposed—opposed vertical, oblique or horizontal lines; (5) Complex H/S or O—a Horizontal element above a Simple or Opposed element; (6) Complex S or O/H—a Simple or Opposed element above a Horizontal element; (7) Crossed—crossed oblique lines; (8) Other or Miscellaneous—generally randomly incised designs. The frequencies of these motifs on the pipes and pottery at the Perry, Pound and Moyer sites were calculated. To derive comparable data on the Middleport site pottery, MacNeish's typological figures were utilized (1952:12). Ontario Horizontal was considered as a Horizontal motif; Ontario Oblique and Lawson Incised were considered Simple; Pound Necked and Middleport Oblique were considered Complex S or O/H and Middleport Criss-Cross was classified as Crossed. Both Ripley Plain and Niagara Collared were counted as Undecorated. This procedure was also used for the Nodwell site pottery data. The descriptions of Nodwell pottery motifs were examined in detail to determine whether the Complex motifs were to be classed as HIS or O rather than S or O/H (Wright, 1974).

Table 1 illustrates the percentages of the various decorative motifs as they occur on the Middleport, Perry and Pound pipes and pottery vessels. The Horizontal motif correlates quite well between the pipes and pots at each of the three sites. At the Perry site, the Opposed motif has almost equal representation on both artifact classes. While the same Opposed motif is best represented on the Pound pipes, it appears on only one

² The Perry site located near Ayr in Brant County was excavated in 1975 by E. Riegert and N. E. Wagner of Wilfrid Laurier University, under licence number 75-A-0007 granted by the Province of Ontario Ministry of Culture and Recreation.

Pound Pottery vessel. The Simple, Complex and Crossed motifs show little if any correlation within these sites. At the Middleport site, the Simple and Crossed motifs which decorate a combined total of 37 per cent of the pottery, are used on only 1 per cent of the pipes. The Simple motif does not appear at all on the pipes. At all three sites, Complex motifs decorate both classes of artifacts, but the Complex S or O/H motif occurs almost exclusively on the pottery and the Complex H/S or O which decorates the pipes at all three sites is found on only Pound pottery. Approximately one-third of the pipes are undecorated, whereas very little pottery is undecorated. It may be that the intrinsic value of pipe shape and the possibility of burnishing diminished the need for decorative motifs on pipes.

TABLE 1
PERCENTAGES OF DECORATIVE MOTIFS FOR PIPES AND POTTERY

	Middleport		Perry		Pound	
	Pipes (175)	Pottery (308)	Pipes (45)	Pottery (80)	Pipes (72)	Pottery (206)
Undecorated	33%	3%	27%		44%	5%
Horizontal	41	38	36	10%	19	16
Simple		20	9	34	6	18
Opposed	7		4	4	10	p
Complex H/S or O	14		20		17	5
Complex S or O/H	1	20		50		53
Crossed	1	17	2	1		
Other	2		2	1	4	3

Several observations and questions arise from this preliminary study. It could be concluded that pottery vessel decorative motifs had been used to decorate a substantial percentage of Middleport substage pipes. There is some evidence that pottery decorative motifs were used on pipes in the earlier Glen Meyer period. At the Porteous site the corded stick, circular punctate and dentate stamp techniques were used to decorate both pottery and pipes (Noble, 1972:24-29). However, it is clear that the pipe makers were selective in their use of these motifs.

One Middleport pipe is the only known exception to the pattern of Complex motifs on pipes always being introduced by a horizontal element, in spite of the fact that pottery makers generally preferred a Complex motif introduced by a simple or opposed element. With two exceptions the Middleport pipe makers also elected not to use the Simple or Crossed motifs which decorate 20 per cent and 17 per cent of the Middleport pottery. At the Perry site the percentage of Horizontal motifs on the pipes is virtually identical to the percentage of Horizontal motifs on the pottery.

The selective application of pottery decorative motifs on the ceramic pipes of the Middleport substage makes it tempting to assume that the pipe makers and pottery makers at any one site reflect different cultural traditions perhaps to clan or previous

village affiliations. The curious fact that 10 per cent of the Pound pipes are decorated with an Opposed type pottery motif whereas only one pottery rimsherd is decorated with that motif could lead one to speculate that abstract motifs on pipes may reflect the matrilineal affiliations of male pipe makers. That is, the technique is one generation later in time. However, the problem is complicated by the fact that the Complex H/S or O motif which frequently decorates pipes has not been found on a large percentage of pottery at any site.

To test the theory that the choice of decorative motif may reflect the tradition of a female pottery maker and a male pipe maker, the Pound site material was re-examined and the Nodwell site was included in the study. The Pound site material was excavated from four different mounds (middens). The material was compared by mound to see whether or not the decorative motifs on the pipes and pottery would correlate within a mound. Presumably the material within a mound was related to a social group, although it might differ socially or chronologically from the material of another mound. Surface artifacts were ignored. Mound 26 yielded no pipes and Mound 4 yielded only four. The study was therefore confined to Mounds 1 and 24 and the results tabulated in Table 2. Two observations may be drawn from these data. It is apparent that none of the motifs, including the Horizontal motif which previously appeared to be the exception, correlate well between the pipes and pottery vessels found in one mound. Secondly, the pottery motifs do correlate well between the two mounds but the percentages of undecorated pipes as well as Horizontal and Simple motifs on pipes definitely do not. In Mound 24, 9 per cent of the pipes are decorated with Opposed motifs, yet these motifs never occur in the sample of 108 pottery rimsherds. Such motifs do, however, occur on the pottery of Mound 1 and on the pottery at other sites. Similarly, Simple motifs which decorate 14 per cent of the pottery from Mound 1 do not appear on Mound 1 pipes but are represented on 9 per cent of the Mound 24 pipes. The Pound material seems to demonstrate that the pottery and pipe motifs do reflect different traditions and furthermore that the pipe traditions vary more from one mound to another than do the pottery traditions. It would

TABLE 2
POUND

	Mound 1		Mound 24	
	Pipes (35)	Pottery (36)	Pipes (33)	Pottery (108)
Undecorated	66%	8%	27%	6%
Horizontal		8	36	14
Simple		14	9	17
Opposed	11	3	9	
Complex H/S or O	17	3		6
Complex S or O/H		61		53
Other	6	3	3	5

appear that the pipes and pots discarded at one mound were either not made by the same makers or were made by the same makers with a different clientele in mind. The former seems much more plausible.

The Nodwell site report provided the data from which pipe and pottery motifs could be compared within ten of the twelve houses. Table 3 illustrates the Nodwell data. An asterisk indicates that Houses 6, 7 and 8 have the largest pipe and pottery samples. Horizontal motifs decorate a large percentage of pipes and pottery vessels but these percentages do not correlate well within the houses. Simple motifs which are not well represented on the pottery with the exception of House 7 (27 per cent) do not appear on the pipes. The only Opposed motif which occurs on a Nodwell pipe consists of "horizontal lines broken by 4 verticals above a number of rows of punctates" (Wright, 1974:125). This pipe was retrieved from the only house in which horizontals are opposed with obliques on pottery rim sherds; the design occurs on two vessels, one of which is also decorated with a horizontal line or stamp below the motif (Wright, 1974:123-24). Although the design on the pipe is not identical to that on the two pottery rims it may reflect some correlation on motif application within the house. The Complex HAS or O motif which appears on a Nodwell pipe consists of horizontal lines above opposing obliques on a pipe in House 7 (Wright, 1974:150, 268). Horizontal lines above opposing obliques decorate one pottery vessel in each of House 8 and House 10; however, blank triangular spaces are not part of the design so these pots actually are decorated with the House 7 pipe motif. This particular Complex motif is also found in the Middleport and Perry pipe collections. As at Pound, the Nodwell pipe motifs and pottery motifs do not always correlate well between houses.

The Nodwell site, however, further substantiates the growing conclusion that although pottery decorative motifs were used to decorate ceramic pipes during the Middleport substage, they reflect at least two different traditions at any one site. If the women were making the pottery it would seem likely that the men were making the pipes following a male tradition of pipe decoration which may or may not reflect the influence of a pipe maker's matrilineal affiliation. The lack of correlation of pipe motifs between mounds or houses may indicate that several pipe makers made the pipes for the men in one or more houses. It is equally plausible that the lack of correlation reflects different clan affiliation.

A significantly large sample of Simple, Opposed, Crossed and Complex pottery decorative motifs on ceramic pipes appears to be characteristic only of the Middleport substage. Only two examples of these motifs were found in the later Moyer site sample of 151 pipes. Similarly, 2 of the 91 Lawson pipes were decorated with Simple and Opposed motifs. Emerson's statistics on the pipe types found at Bosomworth, Payne, Black Creek, Downsview, McKenzie and Benson sites would seem to indicate that no such motifs were found on the pipes at any of these sites with the possible exception of Payne where decorated bulbous and conical decorated pipes represent 3.6 per cent of the total sample (Emerson, 1966:189). The Horizontal motif is the only pottery motif which was used to decorate a large percentage of pipes in the later Iroquoian period. The few pipes decorated with other motifs are so aberrant that they may be items which were inherited from Middleport ancestors. The presence of one aberrant pipe decorated with a vertical dentate stamp at the Nodwell site may also reflect this practice (Wright, 1974:125). Although grave gifts are discussed in the ethnographic literature it is not clear how the deceased's own personal possessions may have been disposed of (Tooker, 1967:130-31; Trigger, 1969:106).

TABLE 3
NODWELL

House	Undecorated		Horizontal		Simple		Opposed		Complex HIS or O		Complex S or O/H		Sample		
	Pipes	Pottery	Pipes	Pottery	Pipes	Pottery	Pipes	Pottery	Pipes	Pottery	Pipes	Pottery	Pipes	Pottery	
I	33%	5%	67%	35%	–	15%					–	–	25%	(3)	(20)
2	100		–	50								–	50	(²)	(2)
3		–		25								–	63	(0)	(8)
4		6		31		6						–	44	(0)	(16)
5	100	–	100	–	–	–	6						–	(1)	(2)
*6	44	–	44	40	–	5	–	2	–	12			28	(18)	(43)
*7	30	–	60	30	–	27	–	–	10	7			30	(10)	(30)
*8	35		35	25	–	6	–	1	10	7	–		39	(20)	(91)
9	20	–	40	22	–	9	–	2	–	2	–		52	(5)	(44)
10	14	–	57	41	–		–	5	29	9			27	(7)	(22)
II	50	–	50	64	–	7	–	–	–	–	–		21	(2)	(14)
12	100	–	100	29	–	9	–	–	–				55	(1)	(11)

It cannot be argued that Middleport substage pipes, which were decorated with Simple, Opposed or Complex motifs, belong to only one pipe shape. Table 4 indicates that these motifs are found on trumpet, barrel, conical and vasiform pipes.

TABLE 4
PIPE TYPES DECORATED WITH SIMPLE, OPPOSED AND COMPLEX MOTIFS

Pipe Type	Pound	Perry	Nodwell	Moyer	Lawson
Decorated Conical	18	4	4		
Decorated Trumpet	4	6		1	1
Decorated Barrel		3	1		
Decorated Vasiform				1	2

CONCLUSIONS

Several implications arise from this study, aside from the previously acknowledged fact that pottery decorative motifs also decorated Middleport substage pipes. Perhaps the most important factor is the statistical evidence which would seem to indicate that pipe makers were men working from a different tradition than the women pottery makers with whom they lived. Furthermore, the pottery decorating and pipe decorating traditions were related at some level which resulted in decorative motifs being shared, but not highly correlated within one male-female cultural unit, whether it be represented by village, midden or house. The implications are that by comparing the pipe motif statistics at one site with the pipe and pottery motif statistics at culturally related sites, one might be able to determine to what extent the pipe motifs reflect matrilineal affiliation and to determine ultimately the movements and chronological relationships of male and female populations. The Middleport substage sites included in this study, while temporally related, are not related spatially or culturally to a degree which permits us at this time to resolve the question of the impact which matrilineal affiliation may have had upon the pipe making tradition.

A more immediate implication of this study is that for Middleport substage sites it may be useful to compare sites on the basis of pipe decorative motifs as well as on the pipe form typology which has been employed previously by most scholars. The Moyer site pottery correlates well with the pottery of Middleport substage sites; its pipes, however, are not at all characteristic of that period in that they are not decorated with Simple, Opposed and Complex motifs. They are largely plain, or ring trumpet pipes. Consequently, based upon the pipes recovered, Moyer appears to be an early Iroquoian site. Seriated with the Pound, Perry and Middleport pipes on the basis of standard pipe types, the Moyer pipes correlate well with the Perry pipes, many of which are also trumpet-shaped (Table 5). However, when the pipes are seriated on the basis of decorative motifs, Perry appears to be much closer to the other Middleport substage sites and more distant from Moyer (Table 6). This method of analysis may be more valid than the typological approach in light of Weber's conclusion that the Plain Trumpet, Ring Trumpet, Iroquois Ring, Conical Plain, Conical Ring and possibly Elongated Ring types have no significance in time or space (Weber, 1970: 130-37). However, both seriations may be

useful in the discussion of the cultural affinities and chronological ordering of the Perry and the Moyer sites.

TABLE 5
SITE SERIATION BASED ON TRADITIONAL PIPE TYPES

	Middleport	Pound	Perry	Moyer
Middleport		150	102	78
Pound	150		121	75
Perry	102	121		127
Moyer	78	75	127	

TABLE 6
SITE SERIATION BASED ON PIPE DECORATIVE MOTIFS

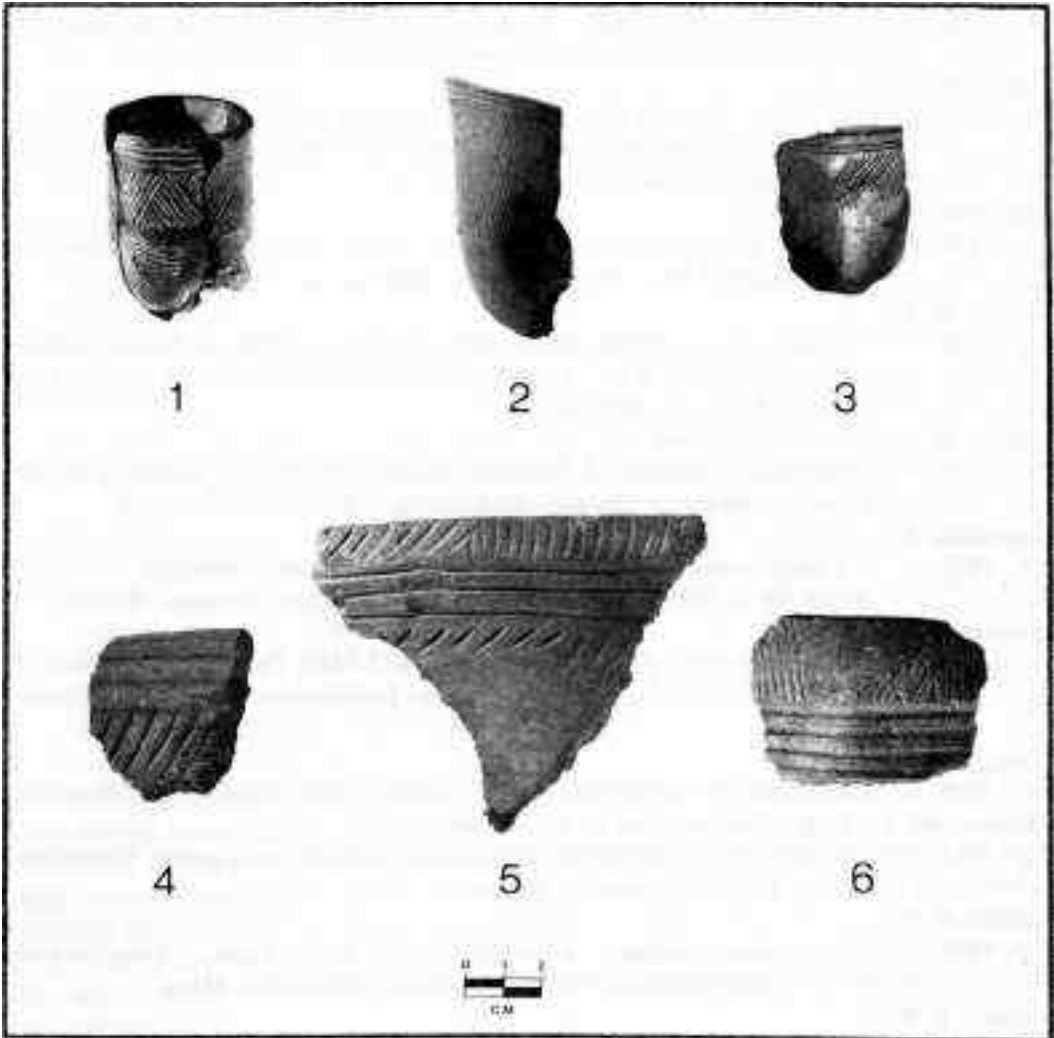
	Pound	Perry	Middleport	Moyer
Pound		146	147	130
Perry	146		165	132
Middleport	147	165		145
Moyer	130	132	145	

One may conclude, then, that the statistical evidence indicates that men probably were making ceramic pipes. The degree to which matrilineal affiliation may have determined the overlapping of decorated motifs on the pipes and pottery vessels of the Middleport substage cannot yet be determined. However, the comparison of decorative motifs on the pipes and between the pipes and pottery within and between sites may lead to a more complete answer. In the meantime, similar studies which shed light on interrelationships of male and female population components at various sites are to be encouraged.

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Complex Motifs on Pipes and Pottery



1. Pound site pipe - Complex H/S or 0
2. Perry site pipe - Complex H/S or 0
3. Pound site pipe - Complex H/S or 0
4. Pound site rimsherd - Complex H/S or 0
5. Pound site rimsherd - Complex S or 0/H
6. Moyer site rimsherd - Complex S or 0/H