

The Bulletin

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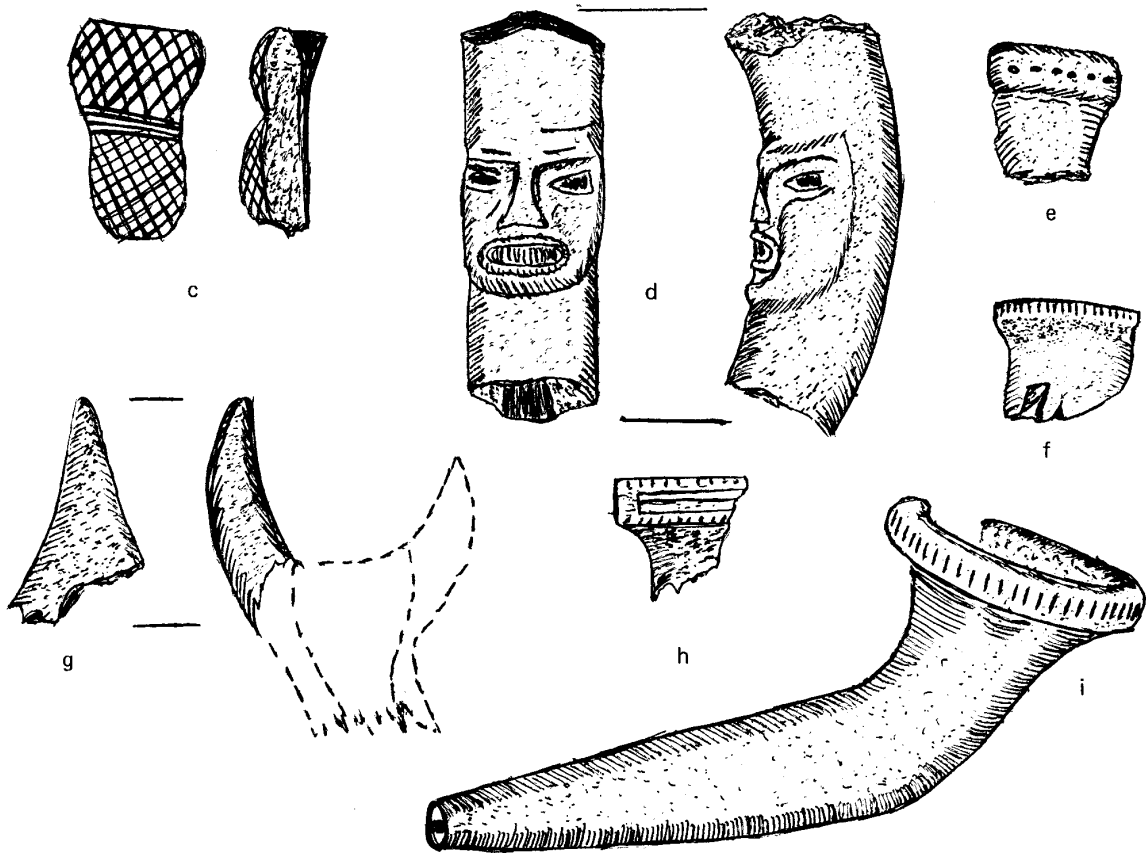
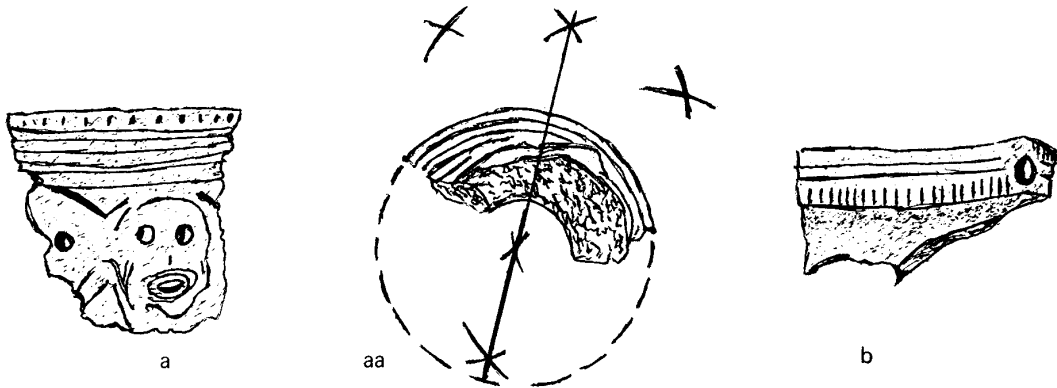
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THE BUYEA SITE OND 13-3

Theodore Whitney, NYSAAF

Chenango Chapter

INTRODUCTORY

There are about 35 known Oneida Indian sites, roughly encompassed in a sixteen mile square, lying south and south east of Oneida Lake in New York State. Their occupancy spans from the middle 15th to the late 18th centuries, with sparse remnants of the Oneida tribe, Iroquois Five Nations, still living in the area. Although spread out on several ridges, these villages all lay in one drainage system, that flowing northerly into Oneida Lake.

In spite of this compactness, no archeological research in depth has been ever made on the Oneida, and indiscriminate, unrecorded, unscientific digging and wide dispersion and loss of artifactual material makes such a study more difficult each year. The report that follows is not that depth study but, rather, one small facet that might ultimately be useful in such an undertaking.

No site study in Oneida territory can be fully pursued without a consideration of the unique cultural background history of its people. Although we subscribe to the "in-situ" origin theory for the Five Nations, we find no evidence in the area of an Owascoid proto-Oneida. However, this negative evidence is consistent with the long accepted theory that the Oneida people were a relatively recent split from the Onondaga and/or Mohawk tribes. Archeology of the region does nothing to refute this idea, but does raise some additional thoughts and a few questions.

Going farther afield, we are still unable to clarify the relation of the Oneida to the Jefferson County, New York, Iroquois. Their contact is quite evident and verified by the findings of archeology. However, the time, place, extent and nature of contact are not so clear. We can ascribe certain like traits to common origin, migration, friendly trade, proximity or, less likely, to warfare. We cannot lightly dismiss the proto-Iroquois site sequence found by Dr. James Tuck around the Syracuse area. These earlier residents of the region must have been assimilated, displaced or developed into the greater Onondaga of later times. Donald Lenig suggests that these early occupants may have been forced southwestward into Cayuga country by descending Jefferson County Onondaga, a theory he bases on a careful analysis of pottery (Lenig 1965 p. 79). Dr. Tuck's report is not available, but in it he seems to establish a convincing sequence for Onondaga from the proto-Iroquois sites to those clearly including Northern New York influences. In all these theories, there are still disturbing discrepancies in factors of time element.

The location pattern of Oneida sites supports the idea that they are a split from Onondaga. The earliest sites are on the western edge of Oneida territory, adjacent to the eastern fringes of Onondaga. A number of years ago the late Herbert Bigford, Earlville, from his extensive experience of digging Oneida sites, proposed an inverted horizontal en pattern for the eastern movement of Oneida villages, a pattern that has been reinforced by subsequent excavations and site information.

Possibly Bingley, just to the left of Fenner was the first Oneida site, followed, by Rich, Dougherty, Nichols Pond, Simpson, Case, Ingalls, Tuttle, Buyea, Moon, Goff, Bronck, Olcott,

COVER ILLUSTRATION

Pipe Pieces from Buyea Site, a, Bowl Fragment with Faces; aa, Schematic Projection of Bowl Curvature; b,h, Rim Section of Coronet Type; c, Acorn Type Bowl Fragment; d, Stem Section with Effigy Face; g, Fragment with Projection of Possible Design; e,f,i, Circular Trumpet (i, partially restored). a,b, Gibson Collection; d, Barone Collection; i, Bigford Collection, Colgate University; h,c,e,f,g, Whitney Collection.

Vaillancourt, Diable, Bach, Cameron, Wilson, Blowers, Thurston, Marshall, Stone Quarry, Dungey, Sullivan, March, Collins, Lanz-Hogan, Upper Hogan, Primes Hill, Oneida Castle, Sterling, Oneida Lake. This list is not complete and probably erroneous in part; there are sites half-known, lost sites and destroyed ones. However, this is the major portion and will serve as a beginning framework.

It is in this eastern movement of the Oneida that we find our problems and challenge in the Buyea site. From which site did its people come and to which site did its people next move? It lies in a concentration of prehistoric sites, several within a mile. We hope to get material for analysis that will help to confirm our sequence. Also material evidence will be sifted for signs of contact with more remote Indian groups.

In recent years we have spent some time in trying to locate the new and lost sites we mentioned above. It was in the course of the survey of a small stream descending from the high valley wall that we encountered the Buyea site. It was some satisfaction to us to find that our survey techniques worked, even though we soon found that Buyea was well known, long dug, and even had a New York State site number, Ond 13-3. We had several reasons for choosing it for excavation but the fact that we had independently found it added some incentive.

The Buyea (also Buyer) site in the township of Lincoln, in Madison County, lies on a promontory that juts out between two very deeply eroded and converging ravines which probably had a light flow of water in Indian times. The site, at 900 ft. elevation, is 300 ft. higher than the valley floor of Cowaselon Creek one-half mile to the east. The soil was a silty loam with higher clay content in spots. Because limestone outcroppings and limestone surface stones are everywhere in this general area, we did not test the soil but we assumed a high lime content.

We wanted a prehistoric site for study, thus, for personal preference only. We noticed the flat surface of the village, relatively unmarked, promised to be rewarding in settlement pattern work. It was not a rich site, not well known, and we would be relatively free from interference from the relic hunter during our two seasons of the project. The side hill middens held pottery sherds for a good typology study. It was a small site and within the capabilities of our limited labor force and financial means.

One of the group, Dr. Richard Hosbach, prevailed upon us to work in metric units. We first attempted a two meter grid, found it rather unwieldy and soon abandoned it in favor of a one meter grid. This brought us both advantages and disadvantages. A one meter square is slightly cramped for digging room but as we had only short periods of working time on our Wednesday, 4 p.m. digs; the one meter square could be completed and recorded in one session, whereas larger units would be constantly unfinished. We used a system of continuous back-filling so the site was never excessively torn up. This made better owner-excavator relations.

The datum point was selected nearly at random and, using the southwest corner reference stake for our squares, we began. Although the pattern was not immediately discernible, we found our first significant postmold in our first square. We extended our stakes as digging progressed and brush was cleared, a procedure we do not recommend; pre-surveying would have been better. We had to spend a great deal of time re-checking and squaring our grids as we advanced.

For our own interests and for later photography, we raised our post mold markers after recording and as we backfilled so they were visible above ground. This proved a good procedure for us as we could thus demonstrate to the farmer and others what we were doing.

HOUSE PATTERN

The house pattern was the greatest success of our excavation at Buyea. It was encountered at once and unfolded predictably. There was little evidence of repair and no overlapping or rebuilding interference. The house extended for 36 meters (120 ft.) from northwest to southeast doorways, reaching nearly across the neck of land that the site oc-

cupied. The longhouse averaged 5.25 meters (17.5 ft) in width, but was narrowed to a little more than 4.5 meters (15 ft) at one point by a curve in the west wall. This curve may have been caused by immovable trees or a rather sharp elevation at that point. In the east wall there were two places where a group of small molds, close together, suggested repair. The northern one curved out from the wall and may have been a small side entrance. An interesting feature was disclosed when independently discovered and slanting postmolds were plotted and found to be directly opposed to each other. These posts near the center of the house were evidently needed to give more rigidity to the long building. This bracing on the east wall coincided with the closely spaced posts that suggested repair.

A row of posts about a meter outside the northwest entrance was interpreted as a wind shield or buffer. Beyond this was a cluster of small postmolds that could have been drying racks of some kind. One single post, 4.5 meters (15 ft.) from the northwest doorway, is convincing as a signal or trophy pole. A careful extension of excavation on the end facing away from the prevailing winds showed no wind buffer protection. There was a sharp decline in slope at the southeast doorway which may have caused the termination of the building there, although both doorways are about the same 5.5 meters (18 + ft.) from their respective palisade lines.

Considerable irregularity was found in the placement of the bed platform posts; they did not match up in pairs, nor keep a uniform distance from the outside walls. Some of the better delineated bed spaces were about 2.4 meters (8 feet) long and 1.5 meters (5 ft.) wide. Quite a number of blank spaces and random post holes occurred in the interior. Despite careful testing, some questionable ones would get charted. In the southwest corner is an arrangement that suggests an enclosure. We, in a humorous vein, called it the bear pen. But in van den Bogaert's journal of his trip through the Mohawk towns in 1634, he twice mentions bear being kept captive and semi-tamed, to be eaten later when fatted or when food was scarce. This feature may well have been such. It did not seem to be for grain storage, no extensively stained humus and no charred corn being present. In fact, only two kernels of charred corn were recovered in the entire dig. The central corridor was about two meters wide (6 2/3 ft) and contained ten fire spots, one small hearth and two features tentatively called roasting platforms. We found evidence of ash thrown back under the platform in one instance, but the fires were generally very clean.

The small carefully laid stone hearth was 45 cm (19 3/8 in) in diameter and 15 cm (5 7/8 in) deep. It was filled with charcoal but no amount of refuse was recovered in or around the pit.

A small prepared roasting platform, a rare feature in the interior of a house, was located about 7 meters (23 ft) from the northwest entrance. It was 70 cm (28 in.) by 80 cm (32 in.) aligned with the central corridor of the lodge. A mass of charred wood pieces, 1 cm to 7.5 cm (3 in.) in diameter were tightly packed in a 20 cm (8 in.) layer. In fact, air must have been largely excluded from the fuel to form such pure, unbroken charcoal. The generated heat was intense and caused a reddening of the lining of the prepared depression, showing at the top as a large oval red-orange ring. The platform, made of slabs of limestone about 8 cm (3 in.) thick, was unbroken and is now somewhat depressed from the edges. There was no refuse nor calcined bone on the platform; it must have been brushed clean after use. A sample of charcoal was kept from the excavated half of the feature. Around this pit, possibly completely around it was a number of small posts. (A small section in one grid record is unfortunately lost.) We question that the feature might have been a sweat lodge of miniature size. However, the amount of fuel and intense heat indications would make this rather unlikely.

The second roasting feature was about 11 meters (37 feet) from the southeast entrance, about 75 cm (30 in.) by 100 cm (40 in.) and also aligned in the central corridor. In this feature the pit was only 8 cm (3 in.) deep in subsoil and 75 cm (30 in.) from the surface, and was lined on the sides and covered by small flat broken stones. Again it was partly excavated, measured, photographed and reburied.

The ten fire spots varied in size and were evidenced mainly by red burn of the soil. This discoloration went down from 1 to 3 in. As mentioned above, they were quite clean of

ash, refuse and fire cracked stones, were not equally spaced, and could not be assigned to definite compartments.

The palisade at the southeast consisted of a single line of posts at the very crest of a precipitous slope into a ravine. The one to the northwest, on a less abrupt slope, appeared to be multiple, even triple in spots. In both cases the barricade must have been rather light, even flimsy in construction. The posts were shallow in subsoil depth, much less than those of the house. This raises some question as to what kind of predator they were designed to keep out.

A test trench extended to the northeast down the median line of the promontory revealed another structure 13 meters (43 ft.) from the east wall of the exposed one. One stray post was 2.5 m (8.3 ft.) west of the house. Undoubtedly, there were more houses on the site but usable space would not allow for a total of more than about four. For lack of time, this could not be investigated further.

We have some statistics on the walls of the house; The east wall had 41 posts, with an average spacing of 89 cm (2.9 ft.); the posts averaged 8 cm (3.2 in.) in diameter and 26 cm (10.3 in.) in subsoil depth. The west wall had only 29 posts but with an average spacing of 1.25 m (4.2 ft.). These posts averaged 9 cm (3.6 in.) in diameter and 28 cm (11.2 in.) in subsoil depth. The 25 east support posts (bed line) averaged 14.5 cm (5.8 in.) in diameter and 30 cm (12 in.) in subsoil depth. The 27 west bed line posts averaged 16.5 cm (6.6 in.) in diameter and 33 cm (13.2 in.) into subsoil. The entrances were about 2.2m (7 ft.) in width.

The house pattern on Buyea was the fourth described in Oneida archeological literature, others being Nichols Pond, (partial) Bach, (partial) and Thurston. The Thurston building was 50 ft. by 25 ft. and from interior post arrangement, probably a council house and not a dwelling. The Bach site house was not fully completed in excavation but for 40 ft. it was 18 ft. wide and then narrowed to 15 ft. for 20 ft. more. The statistics for Nichols Pond are not available.

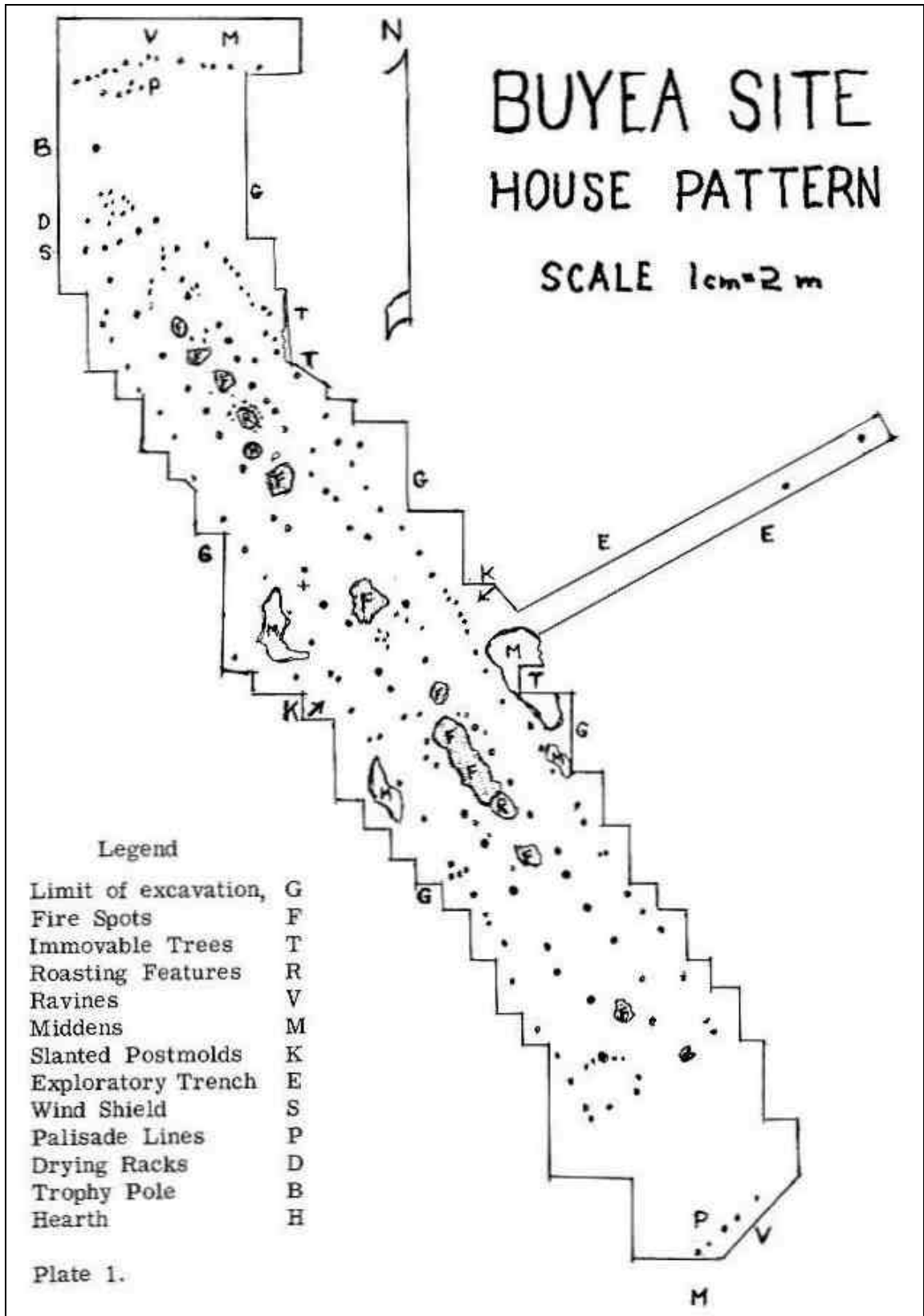
The number of reported house patterns in Iroquois is growing. For comparison a few will be instanced. On Kelso, proto-Onondaga site, we found one of 128 ft, by 22 ft, At the Mohawk Garoga site we found one 225 ft, by 20 ft. At Simmons, on the Niagara Frontier, we note one 63 ft. by 23 ft. At Cornish, in Seneca country, there is a house 65 ft. by 20 ft. At Temperance and Atwell Fort, early Onondaga, Ricklis reports houses about 18 ft. wide. (Ricklis 1966, and by personal correspondence 6/12/66) It would seem that in width, the Buyea house has a closer relation to Onondaga than to the others.

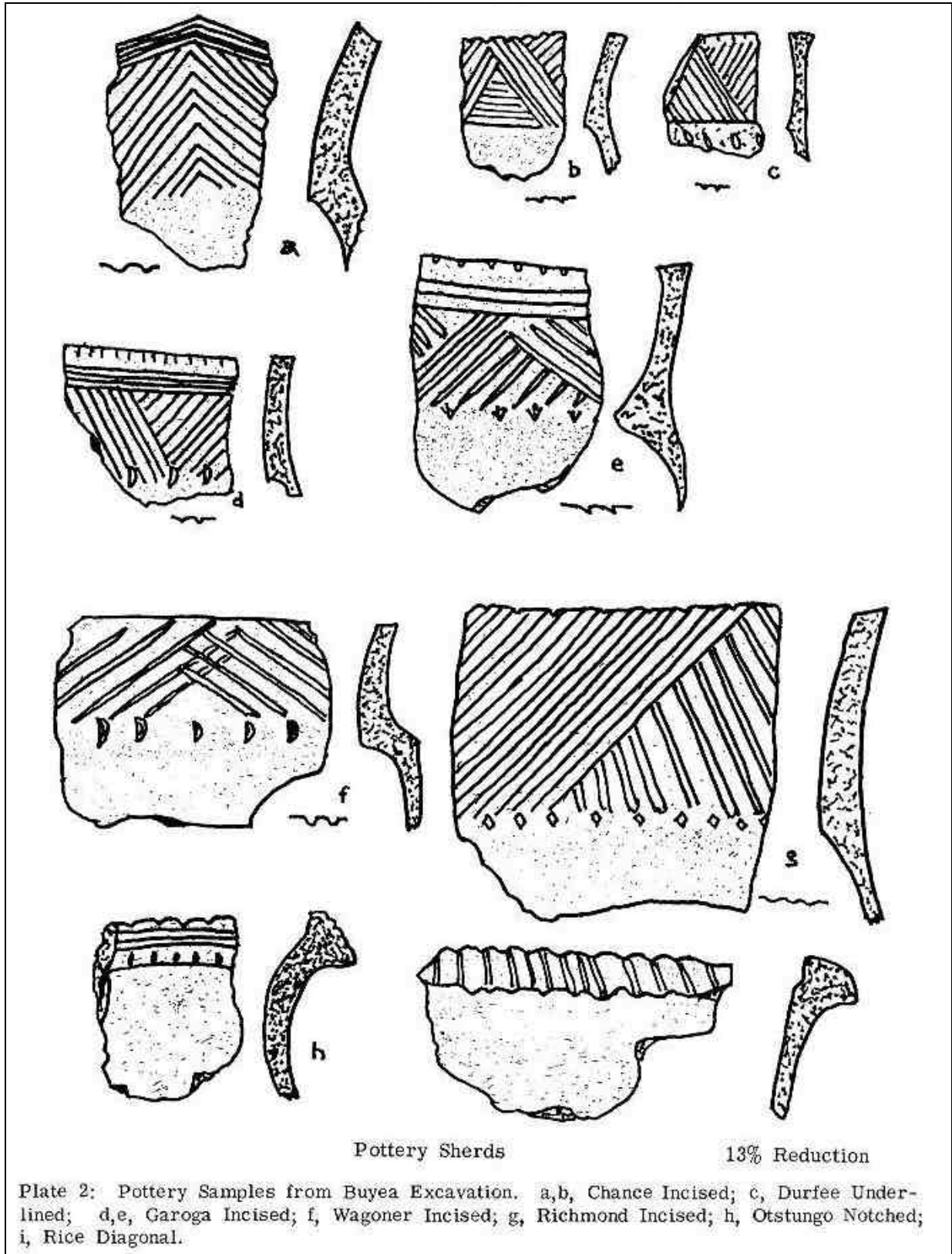
In some respects the Buyea house pattern differed from those east and west of it. There are no storage pits in the house, nor are any yet found on the site. The wall posts are quite widely spaced and almost always single. These characteristics have been consistent for all Oneida houses known at this time.

We were fortunate in not encountering any rebuilding at Buyea and the house pattern was largely uncomplicated. Erosion had been light and only at the southwest section was the pattern overlain by a silting from adjoining knolls. This silt, with a clay content, had compacted to the extent that it was often mistaken for subsoil and the post molds would be concealed under it. The southeast end was very dry and stony; the key door post was assumed to have been wedged in the rocks; we could discern no mold.

POTTERY

With our own sample of collar sherds, those from the Ceramic Repository, University of Michigan, and those in the New York State Museum, we had an ample number for study. In common with others in the field, we encounter a great deal of difficulty in assigning MacNeish's classifications to pottery. In this paper, we will use such an ordering, along with percentage frequencies of several key attributes. There are many variables that can influence this, at best, and if this is kept in mind, the following data may be useful:





On 200 collar sherds we found incising to be as follows: none - 1%; very faint - 13%; shallow broad - 13%; fine sharp - 17.5%; sharp asymmetrical - 32.5%; symmetrical - 23%. This gives 73% strongly incised. There were no cord marked nor push-pull decorations on collars. Three cord marked and two checked stamped body sherds were observed.

In collar heights, of 200 collared rims we measured: low, up to 35 mm (1 1/2 in) - 61.5%; medium, 36 mm - 63 mm (1 1/2 - 2 1/2 in.) - 37.5%; high, 64 mm - 90 mm (2 1/2 - 3 1/2 in.) - 1.0%. The average height was 32 mm; average thickness just above the collar base was 6 mm.

Of 458 rim sherds and fragments, 71% were collared and 29% were thickened lip. Of 300 full rim sherds, 61% were collared and 39% not. From this we infer the greater breakage in collar sherds.

For collar base decorations on 280 sherds we record these techniques:

Pressed across basal ridge	23%
Punctate, round and oval	18%
Punctate, triangular and rhomboidal	11%
Pinch or Scallop	2%
Fine vertical slash	6%
Slash, right to left	20%
Slash, left to right	2%
Plain base	17%
Crisscross	1%

For the shape of the collar base we set rather arbitrary standards:

1. Very little definition	14%
2. Medium definition	52%
3. Strong definition	34%

For lip markings on a 300 sherd sample, we noted 45% marked on exterior only, 2% on interior only, 9% plain and 44% on both interior and exterior.

We counted the number of horizontal lines on collar exteriors under the lip: 0 lines - 21%; 1 line - 8%; 2 lines - 14%; 3 lines - 34%; 4 lines - 18%; 5 lines - 4%; 6 lines - 1%. Thus three lines is dominant for Buyea site collar sherds.

Out of 300 sherds, 88 showed castellations of one of the following styles: rounded, inverted broad V, notched and squared. The inverted V was the most common. Small luted effigy faces were found under some castellations and two sherds showed where the lutes had fallen off.

Three hundred rim sherds were typed as follows using the MacNeish classification (MacNeish 1952) and Pendergast types: (Pendergast 1966)

Type	Percentage	Type	Percentage
Onondaga Triangular	3.6%	Deowongo Incised	1.3%
Cayadutta Incised	22.0%	Durfee Underlined	1.0%
Otstungo Incised	9.3%	Roebuck Low Collar	4.0%
Fonda Incised	1.3%	Low Collar Horizontal *	1.0%
Thurston Horizontal	3.0%	Salem Stamped Lip *	.3%
Syracuse Incised	5.3%	Rice Diagonal	15.0%
Wagoner Incised	4.6%	Otstungo Notched	22.0%
Richmond Incised	1.0%	Lawson Opposed	.3%
Chance Incised	4.0%	Untyped	1.0%

* Pendergast types, the rest from MacNeish

To compare this with other Oneida sites we prepared the seriation which follows*. We were unable to get information on more sites.

Type	Site -	Nichols	Buyea	Bach	Diablo	Thurston
Kelso Corded		.2				
Chance Incised		34.9	4.0		1.3	5.2
Deowongo		6.0	1.3			
Durfee Underlined			1.0	.7	11.6	
Onondaga Triangular			3.6	54.0	28.2	10.4
Otstungo Notched		6.0	22.0	3.3		
Rice Diagonal		2.7	15.0	7.4		
Low Collar Horizontal			1.0			
Salem Stamped Lip			.3			
Cayadutta Incised			22.0	4.0	3.8	11.0
Fonda Incised	} Garoga	42.6	1.3	2.6	11.0	5.2
Otstungo Incised			9.3	1.8	28.2	7.0
Thurston Horizontal			3.0	1.5	6.4	31.3
Roebuck Low Collar			4.0	5.2	1.3	1.0
Richmond Incised			1.0	.7	3.3	1.0
Wagoner Incised		2.9	4.6	1.5		
Syracuse Incised		1.1	5.3	7.0	5.1	1.0
Lawson Opposed			.3			
Cromwell Incised		.2				
Cross Incised			1.0	3.0		
Pinch Base Incised		3.1				
Ontario Horizontal					3.8	5.2
Ithaca Linear						2.8
Huron Incised				1.2		
Sidey Notched				1.2		
Ripley Triangular				1.2		
Oval Punctate				1.8		
Salem Plain				1.2		

* Sources of Information;

Nichols Pond	Lenig 1965: p. 93
Buyea	Current Report
Bach	Whitney 1967: pl XI
Diablo	MacNeish 1952: p. 67
Thurston	MacNeish 1952: p. 67

With another grouping we make a broad comparison using these Oneida sites: Buyea, Middle Prehistoric, Olcott, Late Prehistoric, Bach, Early Contact, Cameron, Full Contact.

Characteristics	Buyea	Olcott *	Bach	Cameron
Triangles under horizontals	36.9	81.9	62.4	23.2
Oblique lines, no horizontals	9.9	7.9	9.2	22.3
Low collars	5.2	.8	5.2	15.8
Thurston Horizontal	3.0	1.6	2.2	4.0
Cross Incised	1.0	4.0	3.0	1.9
Uncollared	37.0	1.6	11.8	17.6
Others	7.0	2.2	6.1	15.2

* (From Pratt 1963: pp. 87-90)

This chart clearly shows the decline of the uncollared vessel in late prehistoric times and its revival on historic sites.

In general, the Buyea pottery was well preserved, hard finished and non-friable. The workmanship was excellent and the body sherds were generally thin, to a minimum of 2mm in thickness. But the grit varied in size with individual sherds and was not all fine; grit up to 5 mm was noted. On this site grit size cannot be used as a time marker.

A comparison of pottery by MacNeish types, by attributes, or by general description shows heavy Mohawk traits at Buyea. The typology seems dominated by the Garoga group, with strong representation of the Otstungo Notched and Rice Diagonal types.

In the task of comparing pottery typologies from various sites, we encounter so many variables that caution must be taken in the use of data. As has already been pointed out, a given sherd can be put in more than one MacNeish type. A student of pottery is prone to favor the types with which he is more familiar. We look for a more standard, more definite way for attacking this problem.

PIPES

The pipe pieces were mostly of the round and square trumpet types. One pipe stem had an effigy face on the curve below the bowl, facing the smoker. One bowl fragment has two faces on it, probably several before breakage. An interesting crisscrossed acorn bowl fragment and a small piece which, by shape, would be the beak of an open-mouthed snake or bird pipe were in the inventory. These pipe styles are of the prehistoric period and rather early.

BONES

The bone artifact material was very scarce, unusual for a site of this age. Included were bird bone beads, awls, harpoon, flat notched point, flakers, beamer, worked phalanges, and a tiny fragment of what appears to be a comb.

LITHIC MATERIAL

The chipped stone and flint material was not abundant but was ample for comparison. There were 8 well fashioned oval knives and one large chipped celt. Scrapers with beveled faces and spalls with worked edges were sparse but present. The projectile points varied widely in quality and characteristics. There were small and rather crude points and long, narrow, superbly made points like those found on eastern Onondaga sites; others would conform in size and shape to those of the Chance Horizon. One perforator was found, similar to the Chance example. (Ritchie 1952; pl. 3 #1, 10, 13)

The usual stone material was recovered in small quantities. There was a heavy, polished rectangular celt and a section of what appears to be a bar celt. There were pestle sections, several metates, mullers, pitted hammerstones, periphery hammerstones, anvils, and crude chopper forms.

Bone refuse, while not analyzed in detail, contained evidence of elk, bear, deer, turtle,

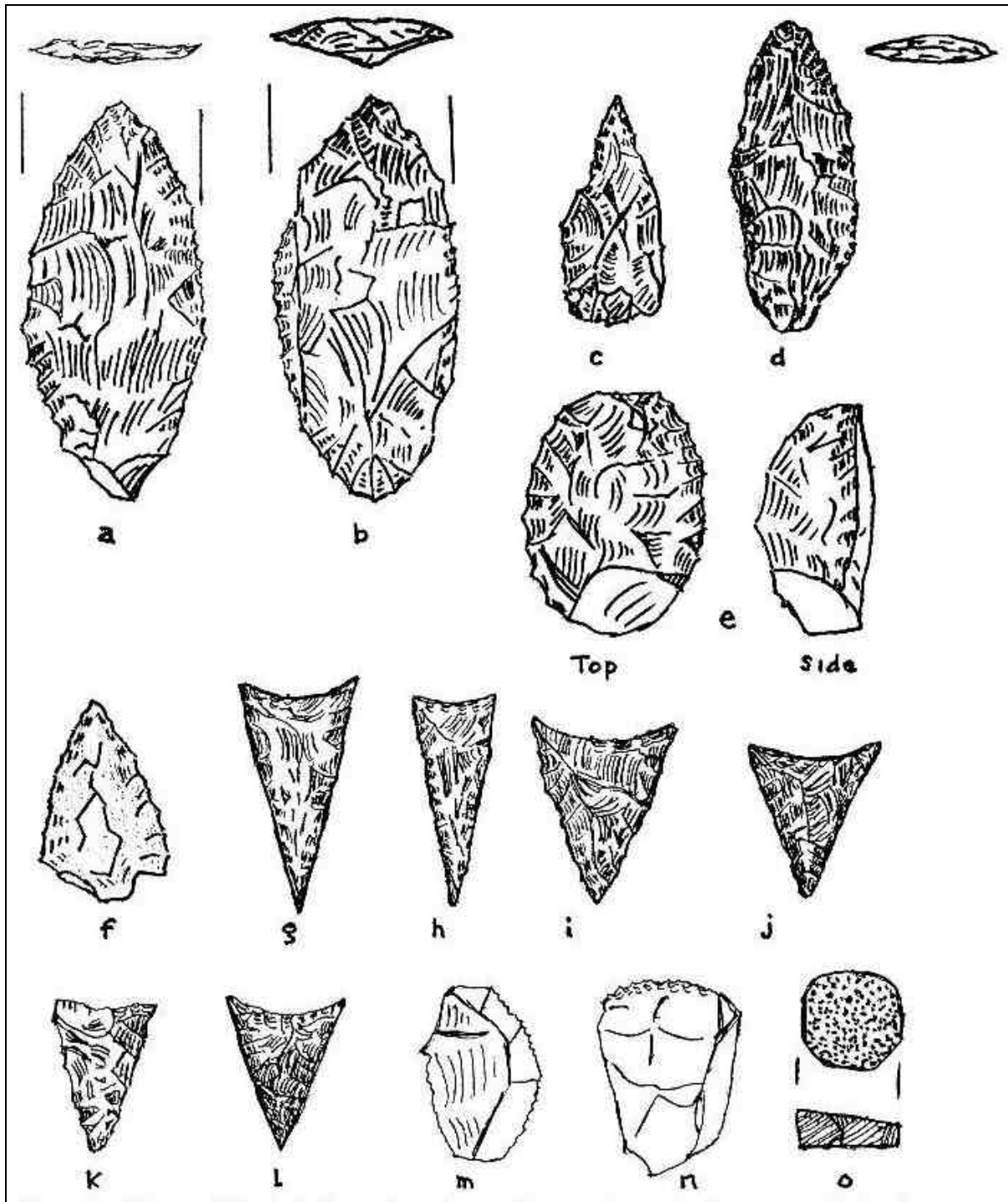


Plate 3: Flint and Worked Stone from Buyea Site, a,b,d, Ovate Knives; C, Perforator; V., Heavy End Scraper; f, Aberrant Point of Exotic material or treatment; g,h, Iroquois Points of Superior Workmanship; i-l, Points of Broader Chance Like Style; k, Point of Cruder Workmanship; m,n, Worked Spalls; o, Faceted Paint Disc of Hematite; a,d,e,l,m, Gibson Collection; f, Gardner-Collection; g-j, Grzibowski Collection; b,c,k,n,o, Whitney Collection.

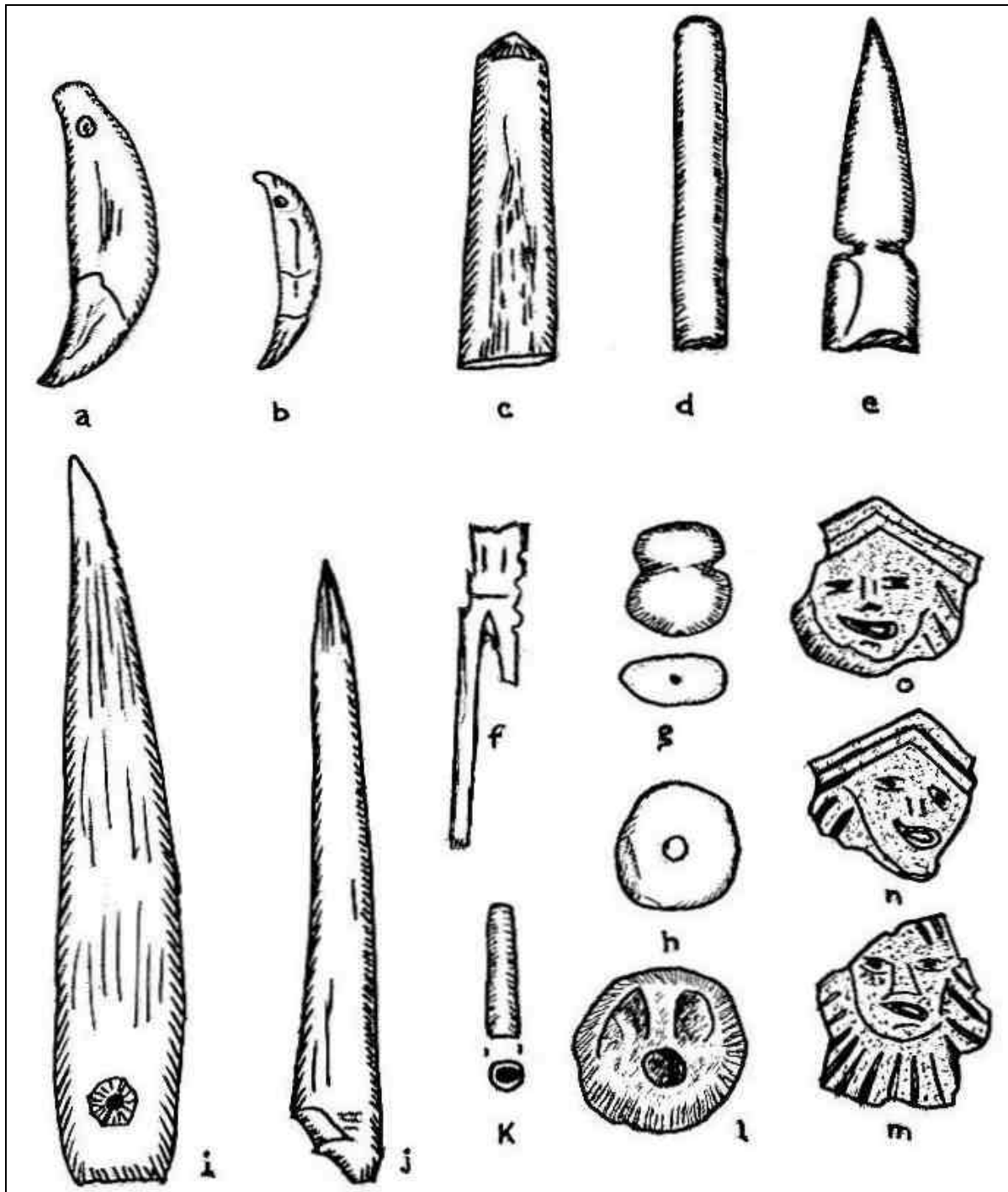


Plate 4: Polished Bone and Effigy Material from Buyea Site. A, Bear Canine; b, Wolf Canine; c, d, Bone Flakers?, e, Flat notched Bone Projectile Point; f, Comb Fragment; g, Unusual Clay Bead, h, Perforated Stone Disc Bead, i, Toggle Harpoon Head of Antler, j, Awl; k, Bird bone Bead; l, Effigy Lute; m, n, o, Effigy Faces from Pots. A, b, Hosbach Collection; s, d, e, i, h, Bigford Collection; Colgate University; j, k, f, l, m, n, o, Grzibowski Collection; g, Whitney Collection.

wolf, small mammals, birds, waterfowl, and large fish that could only have come from nearby Oneida Lake. Deer antler of full maturity and bones of immature deer show a year-round occupation of the site.

One unusual item in the refuse was an elk antler section, 25 cm long and 6 cm in diameter, which had been separated from the whole beam by a process of burning and cutting at both ends. Possibly this was a process in preparing stock for comb manufacture.

At the present time we have plans to return to Buyea only to complete the test trench through the center of the village area to determine, if possible, the number of houses in the settlement. We believe the occupation was light and of short duration.

SUMMARY

While this paper is primarily a presentation of data, some of our general observations and questions will be presented. In his report on the Olcott site, Dr. Peter Pratt (Pratt 1963: 56-90) mentions several diagnostic traits for late prehistoric Oneida and, by contrast, those for middle and early prehistoric times. Medium height collars and thickened lips were popular in middle prehistoric pottery. Earlier Oneida pottery tends to be thinner than late prehistoric, the incising more definite, and sharper. Stanford Gibson, in describing effigies under castellations makes the observation that face effigies were earlier than full figure ones on Oneida sites. (Gibson 1963: pp. 4-5) If the Buyea site is in the sequence with Vaillancourt and Olcott, it is certainly far enough back of them in time to allow for these marked differences in pottery characteristics.

The flint material also shows this earlier trend, in similarity to the Chance and early Onondaga points. No time markers were present in the bone inventory, unless it was the absence of the bone figurine which comes into prominence on historic sites. (Ritchie 1954: pl. 29, p. 67)

Some irregularities appear, that may require some revision of the one village - one time - one people concept of Oneida occupation. We had this situation at the Bach and Diable sites (Whitney 1967: 8) where we noted that Bach pottery was strongly Onondaga, whereas Diable, of about the same period, was predominately Mohawk. In this study, we find Buyea, which is so Mohawk in characteristics in proposed line of sequence with Olcott, so Onondaga in nature. We may have to consider the possibility of neighboring, coexistent, peaceful villages with somewhat different cultural influences. This would help in the allotment of time for occupation, which is now very brief, if we include all sites in a single line of succession. It would also help to explain the small size of some sites like Buyea. In applying this theory, we must be aware of the wide variance in typologies as done by different individuals.

We could not determine the predecessor of Buyea, nor the site which succeeded it, due to a lack of material from these villages. Figuring backward from Bach, quite certainly about 1580 A.D. and allowing about ten years for each site occupancy, Buyea would be occupied about 1520. If we allow for simultaneous occupation of some of the sites, it could be as late as 1540.

In this study, we have had the cooperation of the Indian Museum, Colgate University, the Department of Anthropology, State University of New York at Oswego, where we examined the Buyea material on loan from the University of Michigan, and the New York State Museum at Albany. All of these kindly allowed the use of pottery sherds and artifacts they had from the Buyea site, for our typology data.

We are especially indebted to Dr. Peter Pratt for the studies he has made and published on Oneida material. These have been most helpful as a basic framework for our research. Dr. Pratt's still unpublished manuscript on his major Oneida research is anticipated with eagerness as being of great value to any future efforts in Oneida archeology.

For excavation of the site, the labor, money, research, review of report, artifacts for illustration, we had many contributors beside the writer. The primary group was Stanford Gibson, Joseph Grzibowski, Dr. Richard Hosbach, Allan Gardner, Fred Chesebro. Also helping were: Edwin Gibson, Robert Spilsbury, Richard Weeks, Wayne Weeks, Francis Bar-

one, Henry Wemple, Dr. Robert Stone and many more, for shorter periods. Our appreciation goes to all who contributed in any way, especially to the landowner, Emory Palmer and his family, for their patience and understanding.

Addendum; Since the first part of this report was written, the study of proto-Onondaga made by Dr. Tuck has become available. We would like to make a clarification of a statement made in this report. The reference to Northern New York influences on the Onondaga is our own thought and not an observation made by Dr. Tuck. With this exception, we believe the report by Dr. Tuck is in harmony with our use of it.

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SOME EXAMPLES OF ACCIDENTAL AND DELIBERATE HUMAN SKELETAL MODIFICATION IN THE NORTHEAST

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INTRODUCTORY

The skeleton is considered by many to be an inert, static portion of the human organism. Nothing can be less true. When you bruise your shin the tibia, as well as the overlying soft tissue feels pain. When a bone is broken, it immediately begins to heal itself. During the growth process skeletal structures are extremely sensitive to soft tissue influences. For example, the development of the orbit is dependent upon the growth of the eyeball; the size, number and orientation of nutrient foramina are directly related to the form of the local vascular and nervous supply. Endocrine gland imbalance and dietary deficiencies can seriously alter normal bone morphology and proportions. In short, bone is viable, flexible within limits, and constantly changing and remodeling itself. It can provide insight into life history and often affords the only remaining clues to the past human life and death cycle, both individually and populationally.

The finding of buried human bone has always been of interest to persons the world over. The discovery of non-normal skeletal attributes invariably causes increased excitement. Anyone examining an anomalous traumatized, or, pathological specimen feels compelled to make a diagnosis. Diagnoses range from the factual, such as documenting evidence of a pre-mortem fracture radiologically, to the ludicrous, such as labeling an ossification defect in the sternum (sternal aperture) a sure sign of death from a gunshot wound.

Highly skilled training and a great deal of caution go hand in hand when attempting to draw valid conclusions about non-normal skeletal remains. Far too often, specific designations are made on the basis of non-specific criteria. What to one "expert" is a classic case of syphilis may be interpreted by another as a simple case of ground erosion. The presence of transverse (Harris, growth arrest) lines in a long bone radiograph supposedly records a synchronic interruption in normal growth processes. However, how often can it be substantiated as arising from growth cessation caused by short-term malnutrition as opposed to a static growth period resultant from a high fever-producing disease? This distinction is difficult enough to make in individuals with a known clinical history. It becomes increasingly more speculative when dealing with earlier populations.

A healed fracture of the distal ulnar shaft is easily determined. However, how often can this be proved to be an accidental trauma resulting from a fall as opposed to the lifting and pronating of a forearm to ward off a blow during combat? A very round, high-

vaulted cranium may document deliberate artificial deformation in one population; in another, or even the same one, it may be caused by premature coronal suture fusion.

It is the scientific assessment of both possible and probable causative agents that separate physical anthropologists from laboratory technicians. A comprehensive knowledge of individual age and sex, populational temporal context, and biological affinity is mandatory for even quasi-sophisticated evaluation. Abnormal skeletal structures are prevalent worldwide. It is an understanding of the total cultural setting that is crucial for arriving at hopefully valid diagnoses.

This paper will ignore skeletal aberrancies resultant from anomalous or primary disease conditions. It will concentrate on a few examples of accidental and deliberate remodeling found in New York State. It is implicit in the paper that the cases illustrated are not necessarily representative of all types of modification occurring in this area over more than a 400 year time span. It is hoped that more evidence will accumulate during future studies and lead to a more comprehensive understanding of how the basic plasticity of the human skeleton interacts in both a cultural and environmental framework.

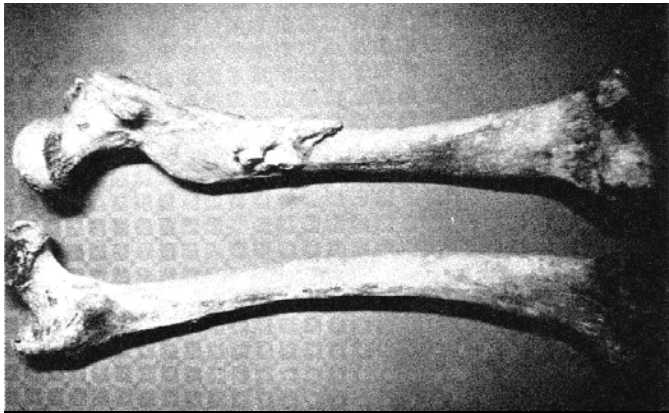
The archaeological provenience of the material is as follows:

Seneca: The majority of the specimens are from the Wray Collection, West Rush, New York. This ancestral homeland of the Seneca has been studied from pre-contact time to 1800 A.D. (Wray and Schoff: 1953) (Sublett: n.d.). The Allegany Reservation Cemetery Relocation specimens are from Southwestern New York and date from the late 1700's to 1963 (Sublett et al: Ms.).

Onondaga: The Bloody Hill specimen dates approximately 1400-1450 A.D. (Tuck: 1969).

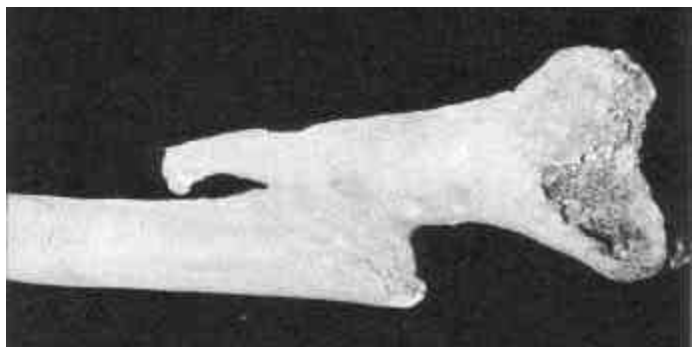
Western New York Iroquois: The Kleis pipe dates approximately 1625 (White: 1967: 27). The Ripley skull dates circa 1600 and is probably from an Erie site (White and Sublett: Ms).

SKELETAL MODIFICATIONS

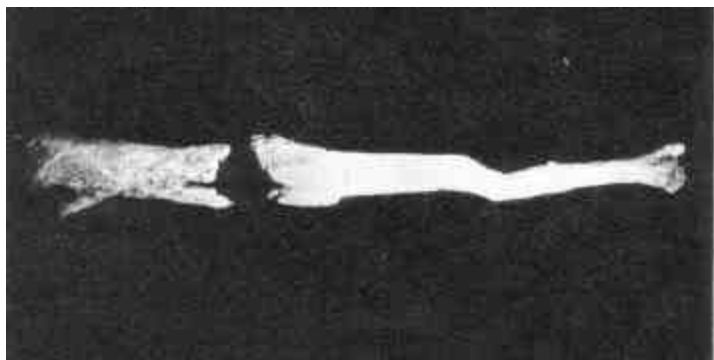


1. These paired femora of a middle-aged male demonstrate marked length disparity. The left femur is normal except for slight torsion and distal osteo-arthritic lipping. It measures 43 cm. in length. The right femur exhibits great anterior/posterior bowing and shortening resulting from a healed fracture of the proximal diaphysis. It now measures 36 cm. in length. Thus, there was a 7 cm. (almost 3 in.) disparity between the upper leg lengths of this individual, probably causing marked gait problems.

1. Dann Site (1650 - 1670 A.D.) Wray Collection.



2. Power house or Dann Site (1630-`670) A.D.)
Wray Collection.



3. Boughton Hill (1670 – 1687 A. D.) Wray
Collection.



4. Power House (1630 – 1650 A. D.) Wray
Collection.

2. This right tibia is an example of a healed but badly misaligned fracture. The bone is functionally repaired, but again, great length reduction is apparent

3. The left ulna of a middle-aged male sustained a double premortem fracture of the diaphysis. The distal site has healed with some misalignment is evident. The proximal fracture never healed. The pieces are still separated; the shaft parts were interdigitating and abrading on each other during any attempt at functional usage.

4. This adult male suffered premortem dislocation of the right hip. The original acetabulum is greatly remodeled. The marginal outline is blurred and the entire socket area has atrophied. Superior and posterior to the acetabulum is a large anomalous socket for articulation with the dislocated femoral head. Both the anomalous socket and head of femur exhibit marginal lipping, extra bony growths, plaquing, pitting and some eburnation. These are the classic symptoms of osteo-arthritis, in this case occurring secondary to the initial dislocation.

Mr. William Cornwell (personal communication) has radiologically documented that this dislocation is not associated with any type of premortem fracture.



5. Allegheny Cemetery Relocations (1700 - 1963)
Specimen Reinterred.

5. This middle-aged male exhibits a massive ossified subperiosteal hematoma on the posterior border of the left mastoid process. It measures 2.2 cm. superiorly/inferiorly by 1.3 cm. anteriorly/posteriorly. Traumatic hematomas (superficial blood clots) are usually reabsorbed into the system. In this case, however, the clot has ossified.



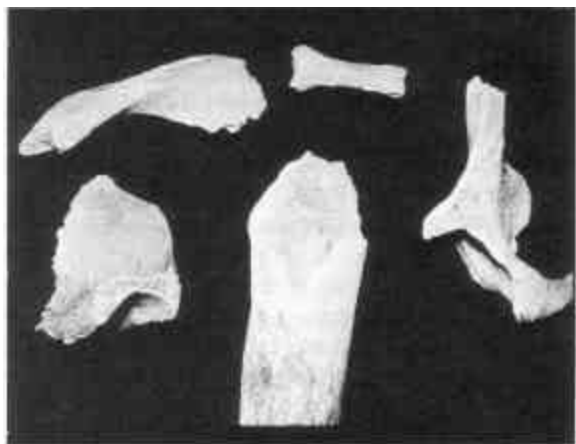
6. Allegheny Cemetery Relocations (1700 - 1963)
Specimen Reinterred.

6. A middle-aged female had suffered four depressed fractures of the outer table, definitely premortem. Two are located in the left frontal area; two occurred in the right parietal (only one of the latter shows in this illustration). From their uniform size, degree of penetration, and amount of bone remodeling, it appears they were all sustained at the same time.

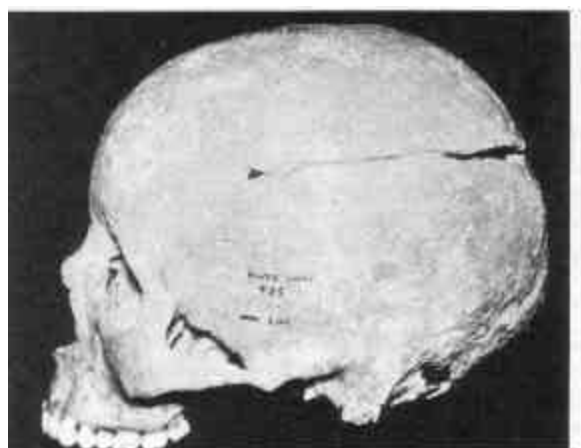


7. Bloody Hill (1400 - 1450 A.D.) Dr. James Tuck.

7. Broken and disarticulated parts of this middle-aged male were recovered from the upper layers of a feature analyzed as a large, single usage cooking pit (Tuck 1969:42). Illustrated is a deep cut mark on a long bone shaft. Almost all the diaphyses exhibited multiple cuts or scratches. These are seemingly indicative of cannibalistic activity; it can certainly be said that this person was artificially defleshed.



8. Cameron (1575 - 1590 A.D.) Wray Collection.



9. Power House (1630 - 1650 A.D.) Wray Collection.



10. Rochester Junction (1670 - 1687 A.D.) Wray Collection.

8. This middle-aged male exhibits even more conclusive evidence of dismemberment and mutilation. The spinous processes of the second through the fifth cervical vertebrae have been cut; actual decapitation probably occurred between C4-C5 or C5-C6. Both scapulae have been hacked and the acromion severed. The proximal end of the right femur was amputated below the lesser trochanter. Some phalanges show nicks and scratches, but none were severed. Illustrated are the traumatized scapulae, femur and a phalange.

9. This is a left lateral view of the skull of a young middle-aged female. There are two hatchet cuts; the anterior one bisects the coronal suture just above Pterion and probably represents a "glancing blow"; the posterior blow penetrated the parietal above Asterion. It was delivered with such force that it caused radiating fracture lines anterior to the coronal suture and posterior to Lambda. It penetrated so deeply that, during the removal of the blade, the inner table edges were traumatized.

10. The tip of a projectile point is still embedded in the right cheek of a late middle-aged male. It is in the maxilla just inferior to the infraorbital foramen. Another projectile penetrated the posterior portion of the zygoma, barely nicked the coronoid process of the mandible, and perforated the lateral pterygoid plate of the sphenoid. The zygomatic arch healed; the pterygoid plate did not. From the orientation, the maxillary penetration came from the front; the zygomatic one came superiorly and laterally.



11. Marsh (1650 - 1670 A.D.) Wray Collection.

11. This probable male adult underwent two extensive premortem tibial traumas and suffered from secondary disease complications. Proximally, there was a fracture, subsequently healed. The midshaft was penetrated by a musket ball which remained in situ. This led to extensive osteomyelitis involvement which eventually was manifested over most of the diaphysis. Tremendous remodeling and the numerous drainage cloacas are illustrated.

Mr. William Cornwell (personal communication) is of the opinion that the two traumatic events occurred separately. He is presently completing a detailed analysis of this specimen.



12. Boughton Hill (1670 - 1687 A.D.) Wray Collection.

12. Middle-aged male. This lateral view shows marked anterior/posterior shortening of the vault form. This can only be the result of artificial deformation since there were no cranial suture closure abnormalities. This individual's Cranial Index is 92.2 (Brachycranial) and the Auricular Height is 129. There is a proliferation of wormian bones in the lambdoid suture. This is usually the case when there has been alteration of normal vault growth processes.

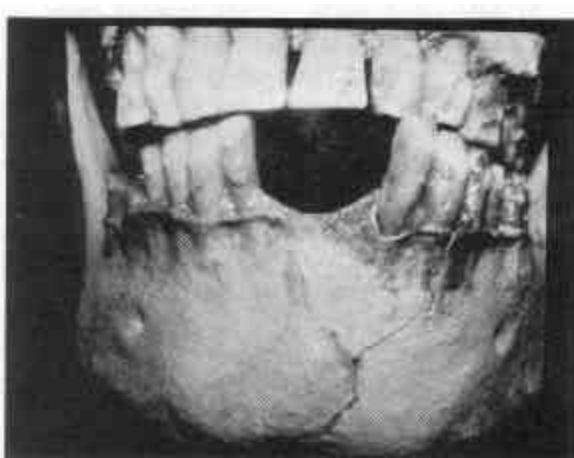


13. Ripley Site (circa 1600) Conklin Collection (now at S.U.N.Y. / Buffalo)

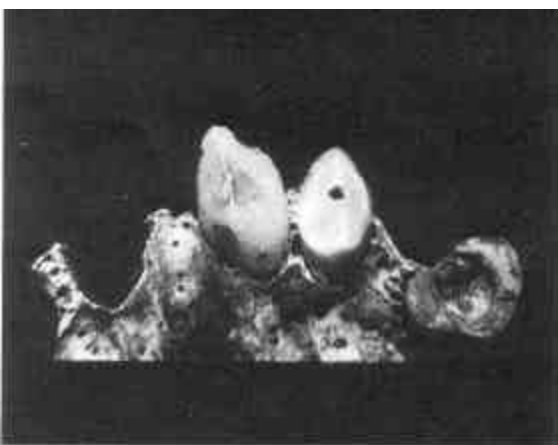
13. A large trephination is situated just to the left of Lambda in this old female. It was incised by the "beveling" method and measures 4.2 cm. superiorly/inferiorly by 2.2 cm. laterally. It is obvious that the original incision pre-dated death by a considerable amount of time. There has been almost total inner table healing by a thin layer of bone produced by the endosteum (Anderson, personal communication).



14. Boughton Hill (1670 - 1687 A.D.) Wray Collection.



15. Rapp (Prehistoric) Wray Collection (now at Rochester Museum).



16. Boughton Hill (1670-1687 A.D.) Wray Collection

14. A trephination had been incised exactly at Bregma in this middle-aged female. The original opening was approximately the size of a quarter. Post-trauma healing has taken place as a raised, irregular ridge superiorally with some medial extensions.

15. There has been early premortem loss of both lower central incisors in this late-middle or old male. All *in situ* teeth have undergone advanced attrition resulting in marked dentine exposure (Stage 3++), but there has been no pulp chamber exposure (Stage 4) or carious lesion formations. There is marked alveolar bone recession and lipping and rolling of the alveolar margins from periodontal disease.

16. The left maxillary central and lateral incisors of this old male have been peculiarly worn in a truncated, sharply beveled manner. Both the lateral incisor and the canine have undergone such extensive attrition that the pulp chamber is exposed (Stage 4). In the canine, a secondary carious lesion has caused further crown destruction.



17. Boughton Hill (1670 - 1687 A.D.) Wray Collection.



18. Creek Site (1800 -) Wray Collection.

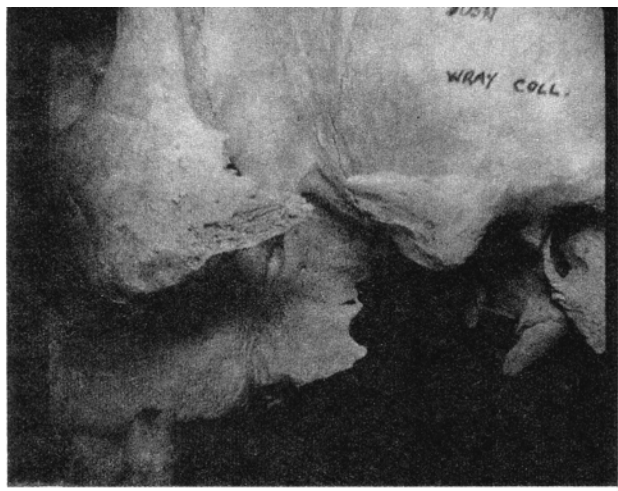


19. Kleis Site (1625) S.U.N.Y./Buffalo Archaeological Collection.

17. In this late-middle to old male, the left maxillary and mandibular canines and first premolars show characteristic "pipe smoker wear". The right side was probably similarly altered, but there are now such extensive carious lesions, especially in the maxilla, that this is impossible to document.

18. Classic "pipe smoker wear" is more evident in this middle-aged male. In this bilateral case, it is the lateral incisors and the canines which are affected. Note the hypoplasia (banding) on the right lower canine.

19. This is one of a pair of ringbowl pipes buried with a middle-aged male. "It had been used, since the bowl contained dottle. The stem is worn from grasping (in the teeth) in such a way that the fired surface of the clay has been broken through and two rough notches are round on the superior and inferior surfaces" White, 1967: 12).



20. California Ranch (Prehistoric) Wray Collection.

20. The temporal portion of the left zygomatic arch has been artificially thinned and polished in this middle-aged male. The zygomatic portion of the arch has unfortunately suffered postmortem breakage and erosion. Since there is no natural explanation for the thinning and polishing, this probably represents a trophy skull carried by a thong.

DISCUSSION

From these few examples it can be seen that skeletal modification responses to external pressures are varied but bound by certain physical limitations. No remolding or healing of bone trauma is indicative of either instant death or a short-lived post-traumatic existence. A "normal", at least functionally speaking, healing response, even though it may lead to secondary but tolerable disease complications, documents living through or with the ordeal.

The illustrations fall into certain broad involvement categories:

1. Trauma
 - a. Probably accidental
 - b. Either accidental or deliberate
 - c. Definitely deliberate
2. Socio-cultural
 - a. Accidental
 - b. Deliberate

Without individual case histories or definite skeletal evidence, most cases of healed fractures (Nos. 1-3) in the Northeast fall under category 1-a. In most instances it is simply impossible to say whether the event was accidental or deliberate, as in the case of a potential "parry" fracture. The hip dislocation (No. 4) is probably traumatic, but Cornwell (personal communication) raises the possibility of its being congenital. The senior author recognized this context but doubts this on the basis that there would probably have been much more femoral head pathology if this were the case.

The ossified hematoma (No. 5) and the depressed fractures (No. 6) could have been induced by either deliberate or accidental blows on the crania. The Allegany Reservation has a long history of both violence and accidents, the skeletal evidence of which is well documented (Sublett et al., Ms.).

The Bloody Hill and Cameron specimens (Nos. 7, 8) lead to the "definitely deliberate" category, but again the interpretation must be made with caution. In both, the cuts had to be made just before, during, or immediately after the time of death; they were definitely not caused by injudicious excavation techniques. The key words brought to mind at the Onondaga site are "torture ritual" and "cannibalism". The Seneca mutilation certainly suggests "torture victim". Considering the skeletal evidence in conjunction with archaeological and ethno-historical information, these designations seem justified. Tooker (1964: 31-39) graphically describes both generalized and specific instances of torture ritual ceremonies

among the Huron. These proceedings, with minor variations, were certainly practiced by the Iroquois. Tuck (1969: 42-43) says the Bloody Hill bones were scattered in the upper layers of a cooking pit measuring 4 by 8 by 2 ft. A hot log fire had been built in the bottom and good sized cobbles had been placed on this to form a roasting platform. It was used only once, and Tuck concluded "Iroquois cannibalism was established at least by the 14th Century." Sublett (Ms.) substantiated that the remains of only a single adult male individual were represented. Thus it seems highly likely that, at a pre-contact Onondaga site, a male captive was tortured to death, definitely defleshed, and probably consumed during the course of a ritualistic ceremony.

The Cameron skeleton seems to be an unquestionable example of a torture killing. The order of mutilation cannot be osteologically documented, but it presumably went from minor incisions in the phalanges through actual decapitation. The burning of the skull was probably conducted postmortem, but from the ethnohistorical records, this is not assuredly the case. Tooker (1964: 33) says "They stripped off all the skin of the head with hair and applied fire and hot ashes to it or dropped a certain melted gum on it." Whatever the order of events, this individual was not dismembered and eaten. He was buried with the torso and all appendages, including the severed right femur, in too nearby perfect an anatomical position for the skeleton to have been ritually rearranged after defleshment.

In regard to the younger female from Power House (No. 9) and the older male from Rochester Junction (No. 10), again ethno-historical information is pertinent for diagnostic purposes. It is surprising that osteological documentation of violent injury or deaths is not more prevalent in the Northeast. Snyderman (1948: 65) in describing a typical Iroquoian raid says: ". . . the warriors gave their war cries, discharged their arrows, and then rushed in with their hatchets. At the end of the combat, they scalped the dead or dying. Every effort was made to carry the day by a sudden, unexpected, fierce but rapid attack." Since this common description is rampant in all Iroquoian literature, why are there not more recognized instances of traumatic demise, especially those involving actual scalping victims? We can only conclude that skeletal remains often fail to provide proper evidence of the actual cause of death and subsequent violation of the body. Granger (n.d.) reports the finding of a skeleton at the Ft. Erie site with numerous projectile points lying in certain anatomical positions, any one of which could have caused death (Anderson: personal communication to Granger). The soft tissue evidence had long been decomposed, but the grave goods orientation could hardly be random or happenstance.

The double trauma sustained by the tibia from the Marsh site is an impressive example of skeletal plasticity (No. 11). The extent of the secondary osteomyelitic involvement records that this individual successfully, in either a strictly biological or supportive cultural context, was able to continue to be a member of his group for a considerable period of time after the traumatic occurrences.

Under the heading of either accidental or deliberate socio-cultural alteration, the following examples are of interest. Although the Seneca did use a cradle board, this custom rarely, if ever, resulted in artificial deformation. Therefore, the deformed skull (No. 12) may not have Seneca biological affinity. All the Iroquois have a long history of incorporating other groups into their tribe. Snyderman (1948: 70) noted: "The Iroquois appear to have developed a well calculated program of destroying tribes as social entities but adopting the members wholesale." Parker, speaking of the Seneca in the early 1800's, (1926: 145-146) reports "The Seneca of this period were a mixed people, and no less than 20 broken tribes were incorporated with them, chiefly the Delaware, Nanticoke, Shawnee, Wyandot, Neutral, Erie, Mingo, and Chippewa." Most Seneca males are longheaded (dolichocranial) with an average Cranial Index of 72.9 and an average Auricular Height of 118.2 (Sublett n.d. 89 and 71). They fall into the Lenapid category established by Neuman (1952: 23). This individual is completely outside the observed ranges of either study. Even more startling is a female from the same site. The cranium was sitting in a brass kettle (Wray Ms) and the Cranial Index was 98.1 compared to the average of 75.3 for female Seneca (Sublett n.d.: 89). Therefore, both of these individuals are probably from a non-Iroquoian cultural group which practiced deliberate cranial artificial deformation. They probably came from the South.

True trephinations north of Mexico are extremely rare, although many "pseudo" cases have been reported. South America, particularly Peru, seems to have been the central area for this practice. However, other instances are known world-wide beginning as early as 3000 B.C. Trephination is a surprisingly effective type of magicofunctional surgery which alleviated intense cranial pressure caused by either disease or fracture conditions. Dizziness, coma, convulsion, epileptic seizure, or headaches were deemed proof of "possession" and considered cause for surgery in some cultures (McKern and McKern, 1970: 37).

Stewart doubts the authenticity of most purported trephination cases in North America. He maintains that in most cases "evidence of healing is lacking or very doubtful." Further, he notes that ". . . their isolation in large skull collections argues strongly in favor of a natural process rather than surgery" (1958: 476-477). The two illustrated specimens (Plate IV, 1-2) are isolated instances within their respective populations; nevertheless, they do not represent either healed pathological lesions or the result of "natural processes." They have been incised by the bevel method.

The Ripley skull exhibits almost total endosteal healing reminiscent of the scanty type shown in #33, Eburne, British Columbia (Stewart, 1958, Plate 8). Of this specimen Stewart noted that the inner bone structure was obliterated by the healing process. The Boughton Hill specimen closely resembles cases from Michigan. Stewart (1958: 475) remarks "these cases usually have a small circular opening in the midline near Bregma." Gillman (1876) claimed the incisions were made after death and were probably intended for suspension. However, the Boughton Hill case does exhibit both outer table remodeling and meager medial healing response. Another unillustrated example of trephination in the Northeast is from the Adams site (Sublett and Wray, Ms.). It constitutes a partially healed incision in a parietal. These three documented examples (Anderson: personal communication) are noteworthy because of the scarcity of authentic trephinations all over North America. Wray (personal communication) found mention of another possible specimen from the Markham site, in an unpublished manuscript by Harrison C. Follett at the Rochester Museum. It states: "One of the skulls removed and now in the possession of the State Museum at Albany, has a small round hole in the base which bears evidence of having been purposely made. This was a custom among certain tribes, as supposed to expel witchcraft. I have never heard of another such find as this being made in this part of the country." The skull, which has not been examined by the authors, was excavated in 1914; the manuscript is dated 1918 (Follett, n.d.).

In a more northern cultural context, the Rapp mandible (Plate IV, 3) might be considered a case of ritual ablation. This practice, as stated in the description, involved the deliberate pre-mortem extraction of the central incisors. This practice was prevalent among the Eskimos. In this instance, however, there is no evidence of lingular alveolar trauma (Anderson, personal communication); therefore, this is a case of "pseudo" socio-cultural mutilation.

The aberrant attritional pattern of the Boughton Hill maxilla (No. 16) is unusual but not isolated. Anderson (1967: 106) reports peculiar wear patterns in the early Tehuacan dentition and attributes, this to the pulling of gritty, fibrous plant material through the teeth. The reason for this case in Iroquoia is unknown. There were no gross malocclusional discrepancies resulting from either a congenital or premortem dental loss situation. It most probably represents successive years of chewing something tough and abrasive in an idiosyncratic manner to have caused such an occlusal distortion.

The "pipesmoker" wear illustrated in Nos. 17, 18, 19 has long been doubted by many investigators. However, this accidental type of dental modification is too well documented in these instances to raise any question about their etiology. There is a second case from Boughton Hill, another late middle-aged male, with identical involvement of the right canine and first premolar. This case was definitely unilateral on the right side. The mesial shifting of pipe placement through time is interesting. Wray (1953) reports that pipe smoking became popular in the Genesee Valley as early as 1590. Since there are two identical cases at Boughton Hill as opposed to the more mesial example at the Creek site, there is a real possibility that habitual pipe placement was culturally rather than individually predetermined.

All these dental examples could only have been produced if the smoker had rotated or twirled his pipe. The illustrated pipe from the Kleis site was modified by simple "clamping." Unfortunately, the dental evidence was not evaluated in such a manner that it furnishes any further information in this case (Gillings and Beck 1967: 48; Sirianni 1967: 5457).

The last illustration (No. 20) is that of a problematical "trophy" skull. Without question, the appearance of "eburnation" (bone on bone wear in advanced cases of osteo-arthritis) on the frontal extension of the temporal bone cannot have either a normal or a pathological explanation. It must represent postmortem modification. The only logical causation of this artificial polishing and thinning is that the skull was defleshed and carried by a thong passed through the zygomatic arch for a considerable period of time. The designation "trophy" skull would best fit this unusual situation. The skull was a gift to Mr. Wray and the archaeological provenience and the presence/absence of the rest of the skeleton is unfortunately unknown.

Briefly, it can be said that these examples of skeletal modification in the Northeast are both informative and enlightening. They "open the door," not only in a League-of-the Iroquois sense, but also in helping to apprise anthropological investigators of the types of skeletal remodeling to be expected in a given region through limited time and space. It is hoped that this superficial glimpse into possible and probable causation will profit both archaeologists and physical anthropologists in the future.

ACKNOWLEDGEMENTS

It is impossible for a physical anthropologist working with archaeologically derived human remains to function adequately in a scientific vacuum. There must be close cooperation with the archaeologists who originally excavated the material. Also, certain problems of analysis can only be resolved with the help of colleagues and skilled specialists in other professions. My heartfelt gratitude goes to the following persons besides the co-author, who read an earlier version of this paper at the 50th Annual Meeting of the New York State Archaeological Association, Saratoga, New York, April 29, 1967.

- Dr. James, E. Anderson, Professor of Anthropology, McMaster University, for help in analysis.
- Mr. William Cornwell, Radiology Division of Eastman Kodak Company, Rochester, New York, for information and interpretation of certain radiological aspects.
- Dr. Marian White, Professor of Anthropology, S.U.N.Y./Buffalo, for illustration and interpretation of the Kleis pipe.
- Dr. James Tuck, Provincial Archaeologist of Newfoundland, for the problem orientation of the Bloody Hill Skeleton.
- Dr. Carlton Conklin, North Collins, New York, for opportunity to study the Ripley trephination.

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SCHULTZ SITE SETTLEMENT PATTERNS AND EXTERNAL RELATIONS:
A PRELIMINARY DISCUSSION AND POSSIBLE INTERPRETATION

Ira F. Smith, III.

Pennsylvania Historical and Museum Commission

This paper is intended to focus upon two aspects of early Susquehannock history: (1) the arrangement and types of houses, pits, and stockades at the Schultz site, and (2) the interrelationships between the early Susquehannocks, whom I will hereafter refer to as Schultz-Susquehannocks, and other cultures, especially the Shenk's Ferry and the proto-Mohawk-like groups in the Wyoming Valley near Wilkes-Barre, Pennsylvania.

The fundamental cultural-chronological position to be taken as a starting point is essentially the one previously established by Witthoft and Kinsey (1959). This position maintains that the Susquehannock Indians are first recognized as a primitive tribal unit in southern New York and northern Pennsylvania, living along the North Branch of Susquehanna River; that stylistically early Susquehannock Schultz Incised pottery is most closely related to Cayuga Ithaca Linear, and later varieties, such as Blue Rock Valanced, to Cayuga Genoa Frilled; that these historic Iroquois types had their evolutionary roots with incised pottery such as Richmond Mills Incised (western) and Chance Incised (eastern); that as a result of socio-economic pressures imposed by neighboring Iroquois groups, the Susquehannocks were forced to move south, ultimately to settle in Lancaster County; and, finally, that these events transpired between A.D. 1550 and A.D. 1600.

Shell-tempered Schultz Incised pottery, the most diagnostic artifact of early Susquehannock material culture, is found on numerous sites along the Susquehanna River between Bradford and Lancaster Counties. It has been found in a small cemetery as far north as the Engelbert site near Nichols, New York; to the west in small amounts in rock shelters along Sinnemahoning Creek, Cameron County; near Shawville, Clearfield County (Witthoft 1959: 27); and at the Girl Scout Rock Shelter, Westmoreland County. Trade sherds have been recovered on the Lower Delaware River at the Overpeck site, Bucks County (Witthoft n.d.: 44), and on the Upper Delaware at the Pahaquarra Boy Scout site in New Jersey (Kinsey n.d.: 626). The presence of Schultz Incised pottery and European trade articles indicated a late settlement of Schultz-Susquehannocks to the south as far as the Herriott Farm site, West Virginia (McCord 1952).

SCHULTZ SITE LOCATION

The Schultz site, the largest known town of this early Susquehannock period, is situated on one of two adjoining gravel knolls overlooking the Susquehanna River in Manor Township, Lancaster County (Figure 1). The site is located south of the town of Washington Boro on property now owned by the Funk Brothers who, incidentally, were most generous in granting permission to disturb enormous areas of productive farm land. Less than .2 mi. northwest of the Schultz site lies the Blue Rock Cemetery excavated by Heisey and Witmer (1962), and thought to represent one of the cemeteries attending the site.

The first expedition to the Schultz site was organized in 1931 by Donald A. Cadzow of the Pennsylvania Historical Commission (Cadzow 1936: 156-200). Applying different techniques from those used today, Cadzow located and dug over 270 pits and 18 burials. At a much later time John Witthoft and Sam Farver, a now deceased amateur archaeologist, did additional testing. It was not until 1968 that the site was again explored by a large team of excavators. At that time members of a Pennsylvania State University Field School, under the direction of Samuel Casselberry, excavated large sections of the Schultz site, and also at the Funck site located on the adjacent knoll. The Pennsylvania Historical and Museum Commission sent a small contingent of college students to the site in 1969. That year we opened and mapped over 72,000 sq. ft., excavated in excess of 450 Indian features, 13 graves, and one early 19th century colonial house.

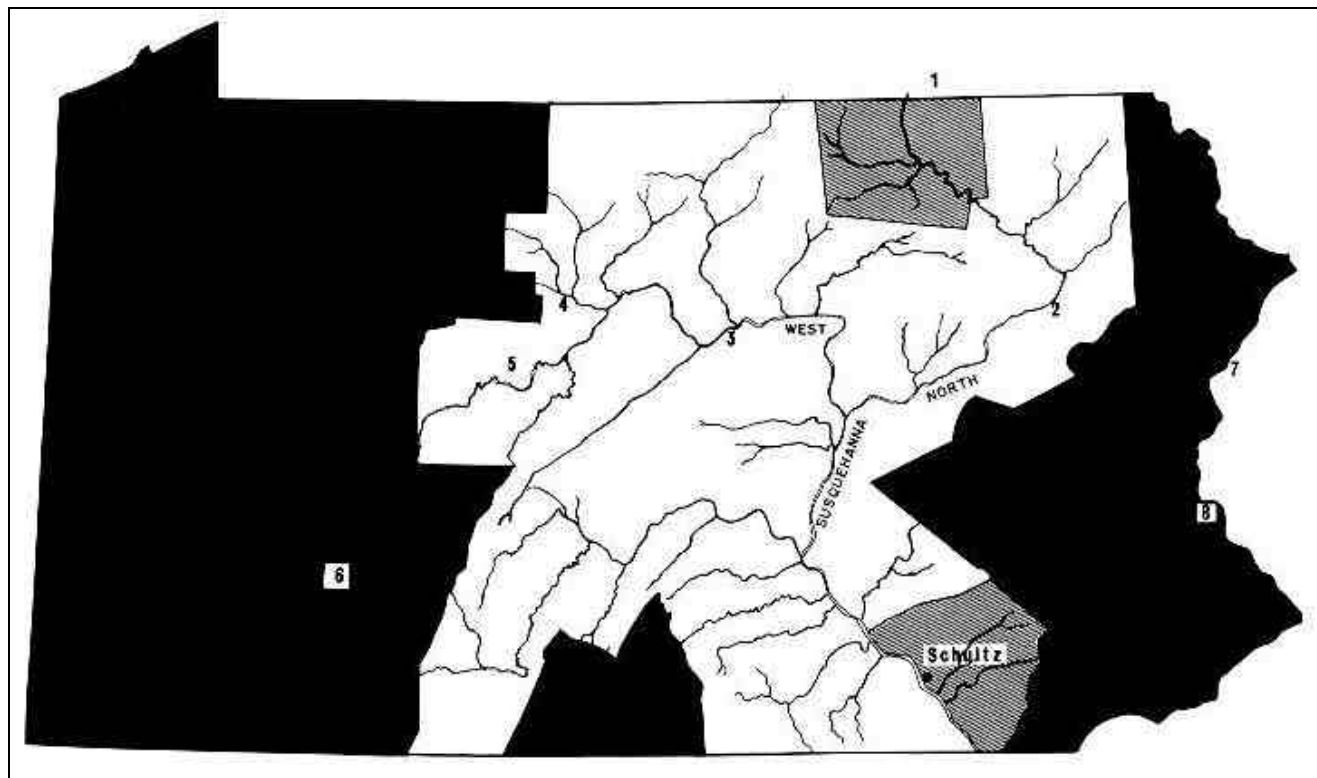


Figure 1. Susquehanna River Drainage of Pennsylvania. 1 Engelbert site; 2 Parker site; 8 Quiggle site; 4 Sinnemahoning; 5 Shawville; 6 Girl Scout Rock Shelter; 7 Pahaquarra Boy Scout site; 8 Overpeck site (Photographs by Terry Musgrave, PHMC).

RELATIONSHIP BETWEEN THE SCHULTZ SITE AND THE FUNCK SITE

The Schultz site, as previously mentioned, is located on a knoll immediately adjacent to a Shenk's Ferry village locally called the Funck site. Withtoft said in 1959 (Withtoft 1959: 24), in a statement that perhaps he might reconsider today, in light of new information, that "these differences (referring primarily to those differences found among the artifacts recovered by Cadzow) suggest a double village made up of two communities, one of Susquehannocks on the front hillock nearest the river and one of captive peoples on the second hillock back from the river." One of the objectives in 1969 was to determine the relationship between the two villages. I think that we can now definitely say that the Schultz site, located on the hillock nearest the river, is chronologically later and physically overlaps the Funck site. European trade items, while they may occur occasionally on Shenk's Ferry sites in Lancaster County, were not found in the extensive diggings by the Penn State team at the Funck site in 1968 (Casselberry, personal communication, 1969). In contrast, articles of European manufacture are found in many of the features at the Schultz site.

Examination of the site map reveals several factors that tend to substantiate a physical overlapping of the two villages {Figure 2}.

1. First, there is the row of large, circular pits in the vicinity of the stockades. These pits are shallow, only about 12 in. deep, and are of very different configuration from Schultz-Susquehannock pits. They contain minimal amounts of garbage, as compared to Schultz-Susquehannock pits, and what they do contain is primarily Funck pottery. The pits are, for the most part, Shenk's Ferry.

2. Second, while there is a thin veneer of small Funck pottery sherds scattered over

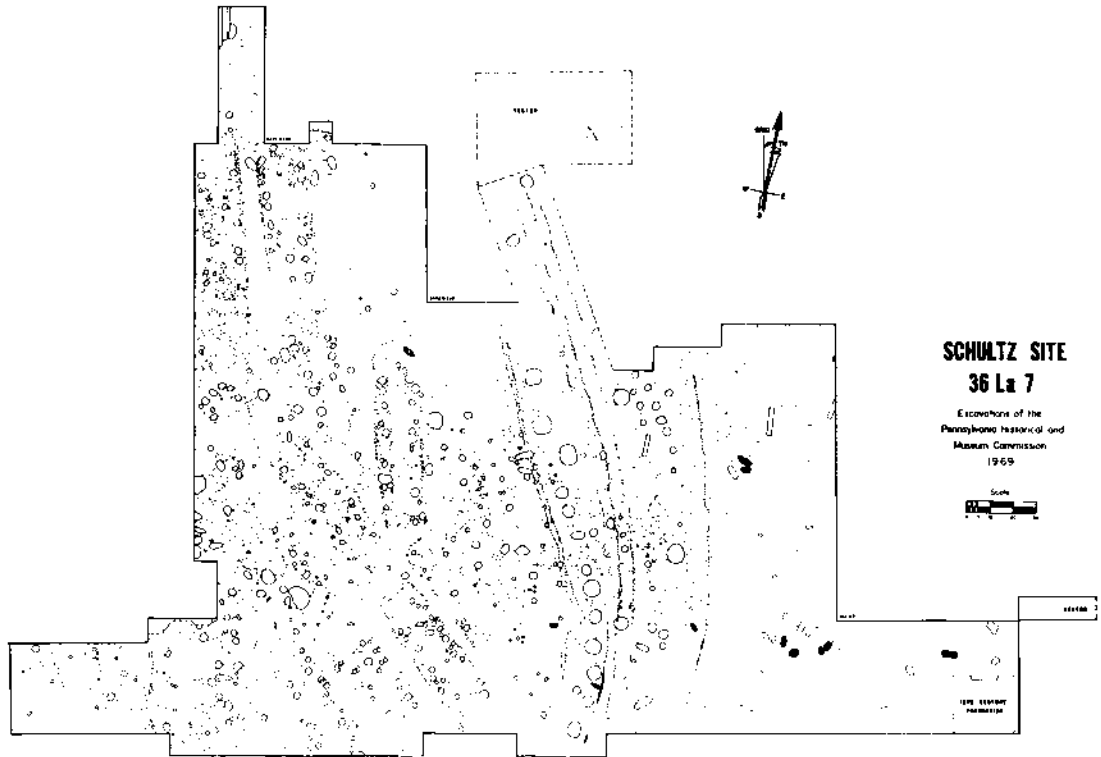


Figure 2. Schultz Site Excavation Map 1969, showing three stockades, longhouses, storage Pits, burials (small hatched ovals), 19th century colonial foundation, and several test areas.

the surfaces of both hillocks, the features to the west of the stockades contain mostly Schultz-Susquehannock culture remains, while those to the east contain Funck-Shenk's Ferry material.

3. Third, the trench, which was extended eastward to the 1968 excavations on the Funck site, seems to demonstrate that no stockade surrounded the Funck village. The three existing stockades are all Schultz-Susquehannock. Postmolds of the middle one were found to pass through at least two Funck features.

4. Fourth, the absence of postmold congestion to the east of the stockades and the presence of congestion to the west, constitute another subtle difference. The inference drawn is that the Schultz site was constructed at some time after the Funck village had been abandoned.

SCHULTZ SITE SETTLEMENT PATTERNS

Another major objective of the project was the analysis of early Susquehannock settlement patterns. The recovery of artifacts was, for the most part, of secondary importance because of the large numbers already discovered during previous explorations.

There was some apprehension among several friends and colleagues that erosion, in addition to Cadzow's early excavations, may have destroyed or distorted the evidence for settlement patterns. The map of the excavation shows that this was not the case and we were able to learn a great deal about Schultz-Susquehannock community life.

Three stockades appear to curve gently around the Schultz site (Figure 2). The inner or westernmost one is somewhat irregular and consists of two principal post lines and a line of smaller posts that may have supported the wall or perhaps a firing platform; the central stockade consists of three principal lines somewhat obliterated by erosion; the outermost stockade consists of only a single line of posts. Erosion accounts for the barren areas on the map and prevented our pursuing these lines for any great distance.

Nine longhouses are readily visible to the west of the stockades. With a little imagination, one could probably identify three more. The structures vary from 50 to 70 ft. in length, and are consistently about 20 ft. wide. Some were, at least initially, arranged in rows with intervening causeways from three to 6 ft. across. Later, however, the houses appear to have been crowded into any available space. Postmolds associated with each structure are numerous, and the numbers that make up the walls suggest considerable repair and long use.

Perhaps the most interesting, and certainly the most unexpected, discovery in 1969 was that the village storage pits were placed inside the longhouses, under the sleeping platforms, and adjacent to each wall. Food storage pits located within longhouses also occur on Late Prehistoric sites in eastern and central New York. They were found in houses at the Garoga site, and signify a practice that may have evolved from the Early Mohawk Getman site stage (Ritchie 1965: 318).

The Schultz pits are of three types: bell, saucer, and silo or U-shaped. They average approximately 3 ft. in subsoil diameter, and range in depth from the very shallow saucer pits to silo pits as deep as 5 ft. Although they have not yet been carefully analyzed, the obvious range of types and related depths is interesting. Erosion certainly accounts for variable depth in some cases; however, Ritchie (personal communication, 1970), in recent correspondence, has indicated the presence, in addition to large food storage pits within New York longhouses, of smaller pits located under the sleeping platforms, which he suggests may be individual cache pits for prized personal articles.

No evidence for central hearths was found. They certainly must have existed and probably were built on the house floor or in very shallow depressions that have not survived. Most of the storage pits contain little internal stratigraphy. The majority functioned secondarily as refuse pits, and contained tremendous quantities of garbage and household droppings.

The most instructive items that were recovered were those of European manufacture. There included iron knives, axes, and awls, copper and brass ornaments, and an occasion-

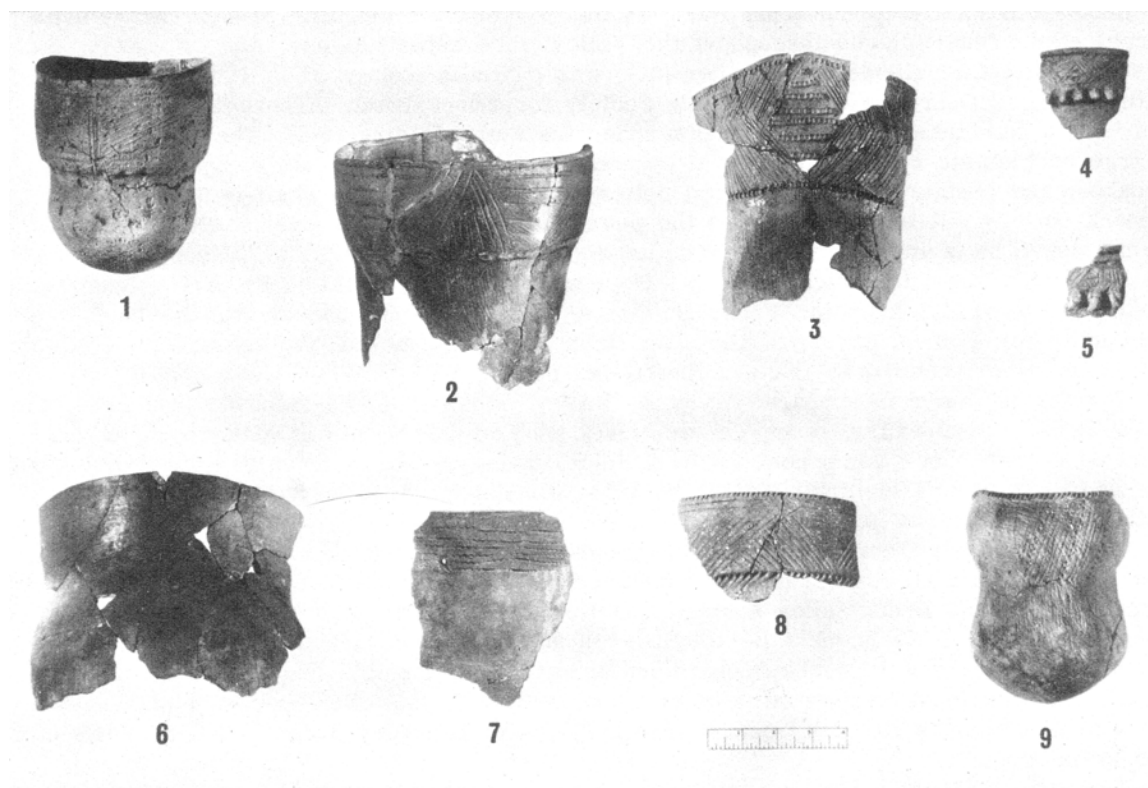


Figure 3. Pottery from the Schultz Site (exceptions Nos. 2-3). 1 typical Schultz Incised pot; 2-3 Susquehannock motif - Shenk's Ferry paste (from Shenk's Ferry site); 4-5 Susquehannock motif - Shenk's Ferry paste (from Schultz site); 6-7 grit tempered, southern derived pottery; 8 Wyoming Valley motif - Susquehannock paste; 9 typical Funck - Shenk's Ferry pot.

al glass bead. Beads were highly valued commodities and were rarely dropped within the village. Most of those that are recovered are found as grave offerings.

Objects of native trade and manufacture were very plentiful. Pottery, especially of the Schultz Incised type, was most common (Figure 3:1). Bone, shell, and stone were used extensively for tools and ornaments.

VILLAGE DYNAMICS AND CULTURE CONTACT

The examination of Schultz-Susquehannock settlement data and the aberrant pottery types found at the Schultz site taken together, indicate a pattern of village expansion which suggests to me, at least, three possible temporal stages of Schultz-Susquehannock interaction with the indigenous prehistoric cultures in the Susquehanna Valley. Examination of additional information tends to support the hypothesis; however, more data are needed, along with more careful scrutiny of that which exists.

Stage I: This is a period of gradual, intermittent, southward movement of Schultz-Susquehannock families and bands from their ancestral home on the North Branch of the Susquehanna River. It is the period of initial contact with indigenous groups, the contact resulting in peaceful coexistence with only minor conflict and with minimal exchange of ideas due to the short duration of interaction. Interaction of this sort occurred in various parts of the Valley at slightly different times. The initial occupation and innermost stockade at the Schultz site may characterize this stage.

The people that the Schultz-Susquehannocks first encountered as they moved south were the proto-Mohawk-like populations living in the Wyoming Valley near present-day Wilkes-Barre. Numerous villages throughout the Valley were settled at one time or another by these people. One village, the Parker site, was partially excavated in 1968 by members of the Frances Dorrance Chapter of the Society for Pennsylvania Archaeology in conjunction with a field team from the Museum under the author's direction. The Parker site is a large prehistoric village surrounded by a ditch, five postmold lines composing a single stockade, and containing grit-tempered pottery quite distinct from shell-tempered Susquehannock pottery. A small portion of the pottery sample was, however, shell-tempered Susquehannock Schultz Incised. A study of its distribution throughout the various features of the site would seem to indicate that the town was built and inhabited by proto-Mohawk-like people who migrated from the Upper Delaware Valley; that Susquehannocks moved into the community for a short period of time; and that when they moved on southward, the town continued to be inhabited by proto-Mohawk-like people.

Pottery of this grit-tempered Wyoming Valley Complex (proto-Mohawk-like) is found, in the Susquehanna Valley, to be characteristic only of the Wyoming Valley; yet, in the Schultz-Susquehannock component at the Quiggle site near Lock Haven, a few proto-Mohawk like sherds, of types identical with those from the Parker site, were mixed into the same feature with numerous Schultz Incised sherds.

Several Shenk's Ferry villages and camps in the Lower Susquehanna may also suggest this kind of face-to-face peaceful interaction. Withoft (1959: 23) reports that at the Shenk's Ferry and Brandt sites a small quantity of Schultz Incised pottery was mixed into the fill of some of the Shenk's Ferry pits. In addition, there are pottery sherds from these sites which are Susquehannock in design motif, but Shenk's Ferry in paste (Figure 3:2-3). As previously suggested, peaceful coexistence in this stage does not preclude minor violent outbursts that may occur when cultures of two very different backgrounds come into initial contact.

Stage II. This is a time of maximum Susquehannock intrusion and conflict with the indigenous cultures; warring and destruction are characteristic. As pressure upon the remaining Susquehannocks in the north continued, more groups moved southward causing increased social and economic tensions with the indigenous hosts, thereby creating maximum conflict and rejection.

The archaeological evidence at the Schultz site suggests a village that was filling up with people. Longhouses show maximum repair and utilization, and all available space is used for erecting new structures. Another stockade is constructed, one that would not only seem to have been stronger, but also expands the inner protected living area of the village. This is in marked contrast to the later Susquehannock occupation at the Strickler site, where the houses generally have better-defined post lines, where there is noticeably less congestion, and where there appears to be more planning in the placement of the structures.

There is a growing body of evidence to support a period of maximum conflict and death by violence. This may best be indicated by the mass grave at the Shenk's Ferry Murray site, and perhaps the Shenk's Ferry burial at the Funck site which had an arrow point lying in the chest cavity.

Stage III. The final stage is a period of decreased conflict, subjugation, and assimilation of remaining indigenous people. The Schultz village, with the addition of captives or adopted families, is expanded once again. This expansion is indicated by the third stockade, a single line of posts which is not as protective as either of the earlier stockades of multiple lines.

Throughout the entire history of the Susquehannock Indians there is evidence to indicate that representatives of various groups--Seneca, Cayuga, Monongahela, European, etc.-resided and/or traded with them. We could probably expect to find members of some of these groups living in the early Schultz-Susquehannock communities from the time of first contact. The presence of non-Susquehannock people, however, was most characteristic of the last stage of Schultz-Susquehannock history, when subjugated Shenk's Ferry were more numerous, and when the Susquehannocks themselves were settled and secure in their principal Lancaster County town.

One sherd from the Schultz site (Figure 3:8), if grit-tempering were to be substituted for the shell-tempering, could be lost with the proto-Mohawk-like pottery of the Wyoming Valley. It is not difficult to imagine a few well-aculturated women, perhaps originally from the Parker site, living and making pottery in the Susquehannock community at Schultz.

Several additional types of unusual grit-tempered pottery, sometimes decorated (Figure 3: 7) and sometimes plain (Figure 3:6), were also recovered at the Schultz site. Numerous fragments of the latter type, found in two pits in widely separated longhouses, suggest resident non-Susquehannock families. Ritchie (personal communication, 1970) reports no counterparts to these types in New York Iroquoian pottery. Instead, the similarity would seem to be with Potomac Creek or Mayaone Cord Impressed or Plain pottery of the northern Piedmont.

Pits containing more than one or two disturbed Shenk's Ferry sherds are not numerous. There are several, however, in different parts of the site which do contain enough pottery of the Funck variety, suggesting that Shenk's Ferry people were at least present in a few of the longhouses. Further evidence of Shenk's Ferry -Susquehannock interaction at the Schultz site is indicated by sherds of Susquehannock design, but Shenk's Ferry paste (Figure 3:4-5).

One puzzling feature-complex is the series of pits located between the middle and outermost stockades. These are interesting in that their alignment and shape are Susquehannock, but the pottery inside was Shenk's Ferry. Unfortunately erosion has removed the last vestiges of any postmolds that may have existed. The pits would seem to lie too close together for a Susquehannock house; perhaps this is a hurriedly constructed house for the addition of Shenk's Ferry families.

The most conclusive evidence for Shenk's Ferry people being in the Schultz community was found in a single grave, located outside of the village in typical Susquehannock burial tradition, and containing a flexed skeleton also in Susquehannock tradition, a Schultz pot, a pot transitional between Schultz Incised and Washington Boro Incised, and one Funck-Shenk's Ferry pot (Figure 3:9).

At present there are several theories that attempt to explain the ancestry of the Susquehannocks and/or their distribution within the Susquehanna drainage. One theory, for example, postulates a continuous evolution from Shenk's Ferry into Susquehannock, while another suggests the possible existence of two contemporary Susquehannock tribal units during Schultz-Susquehannock times, one with its home territory along the North Branch Susquehanna and the other with its territory in the Lower Susquehanna. A third theory, the one that is presently most popular, sees the Susquehannocks as representing a divergent development out of a poorly known Iroquoian ancestry, evolving, and eventually being forced to move southward to the more fertile plains of the Lower Valley. It is to this last theory that the interpretation in this paper shows its most obvious bias.

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OUR FIFTIETH

This number of the Bulletin is the 50th, in a series that has been published on a three -times -a-year schedule without interruption for 16 years, a record that is probably unique in state society archaeological publication in the East. At 40 pages it is also the most voluminous number we have ever published. It was intended to initiate the progressive and ambitious program outlined by the editor in the last number, No. 49, July, 1970. Unfortunately rising printing costs have scotched any hope that the program will ever be realized.

The program of expanded publication announced by the editor was based on an increase in annual appropriation to \$1500, as approved at the annual meeting in April, and on the assumption that the per page cost of printing would rise during the year only at the standard rate of 6% above the \$13.35 per page cost being charged at that time. But the per page cost of the very issue in which the announcement was made turned out to be, on billing, \$16.40, as printed and delivered to the repository at the Rochester Museum Science Center. Almost simultaneously there was received from the printer notification that, effective Jan, 1, 1971, the per page printing cost would be \$19, with the delivered cost estimated at \$21.25. Not only has the projected expansion been wiped out but the annual volume for the year 1971 will be reduced to 72 pages.

With inflation accelerating the Bulletin may very well fall back further in 1972 to 60 pages. When it is pointed out that during the calendar year of 1970 (different from our fiscal year by one quarter) the Bulletin published 100 pages, 30 in March, 36 in July, and 40 in November for our greatest year yet, the effect of the upward cost spiral becomes dismayingly clear.

This is not the place to discuss finances, nor is the editor the proper chairman for such a discussion, but the membership is advised that publication is being hard-hit, may be in mortal jeopardy within the next two or three years, and some serious thinking should be done about it. This 50th issue of the Bulletin does herald a new era, but not the kind the editor so recently had in mind.

ANNUAL MEETING, NEW YORK STATE ARCHEOLOGICAL ASSOCIATION
PROGRAM OF PAPERS
SATURDAY, APRIL 25, 1970

- 9:05 A.M. "History of the Long Island Chapter and Its Museum", Mrs. Stanton Mott, Member of The Board of Directors, Long Island Chapter,
- 9:30 A.M. "The Indians of Eastern Long Island in Colonial Times" - Dr. Lawrence T. Waitz, Town Historian, Long Island Chapter.
- 10:10 A.M. "Introduction to The Long Island Focus Study". Alfred E. Dart, State Program Chairman, Long Island Chapter.
- 10:30 A.M. "An Osteological Evaluation of The Orient Focus Bundle Burial", Dr. George Cottral, Plum Island Animal Disease Research Laboratory, Long Island Chapter,
- 11:00 A.M. "The Effect of the Terminal Archaic and Transitional Period in New Jersey on New York State Archeology", Herbert C. Kraft, Director University Museum, Seton Hall University, South Orange, New Jersey.
- 1:30 P.M. "The Tonawanda Indian Reservation, Past and Present", Charles F. Hayes, III, President NYSAA, Lewis H. Morgan Chapter,
- 2:00 P.M. "An Otter Creek Point from Montrose Point", Louis A. Brennan, Editor "NYSAA Bulletin", ESAF Representative, Metropolitan Chapter.
- 2:30 P.M. "The Gillingham Rock Shelter, Otsego County", Franklin J. Hesse, Upper Susquehanna Chapter.
- 3:10 P.M. "Copper Artifacts from the Engelbert Site", Helene R. Dunbar, Department of Anthropology, Harpur College, Triple Cities Chapter.
- 3:40 P.M. "Excavations of a Late Woodland Fishing Camp at Trois Revieres" - (a) Excavations; Dr. Peter P. Pratt, SUNY, Oswego, Chenango Chapter; (b) Analysis: Marjorie K. Burger, Syracuse University, Chenango Chapter,
- 7:30 P.M. Dinner Addresses
"After-thoughts on the Deep Freeze Art Exhibit", Ronald J. Lipp, artist, Geology instructor Suffolk Community College at Seldon, Long Island Chapter.

"Archaic Campsite at the Wading River Bay", Ronald J. Wyatt, Curator of Anthropology, Nassau County Museum of Natural History, Glen Cove, Metropolitan Chapter.

SUNDAY, APRIL 26

- 9:30 A.M. "A Prehistoric Oneida Iroquois Site (Ond 13)", Theodore Whitney, President, Chenango Chapter.
- 10:00 A.M. "Clans of the Iroquois", Charles S. Pierce, Frederick M. Houghton Chapter.
- 10:30 A.M. "The Corroon's Lake Blade Cache", Daniel H. Kaplan, Assistant Curator of Anthropology, Nassau County Museum of Natural History at Glen Cove, Metropolitan Chapter,
- 11:00 A.M. "Interim Research Report on Wampum Beads and Belts", Charles E. Gillett, Van Epps-Hartley Chapter.

Minutes of the 53rd Annual Meeting
NEW YORK STATE ARCHEOLOGICAL ASSOCIATION
for 1970
Incorporated Long Island Chapter Museum

Southold, New York
April 24, 25, 26, 1970

Executive Committee

The meeting of the Executive Committee was held on Friday, April 24. President Charles F. Hayes III called the meeting to order at 8:22 p.m. The following voting members including state officers, Chapter presidents and trustees were present:

Charles F. Hayes, III	(Morgan Chapter)	Reginald Peterson	(Long Island Chapter)
Michael J. Ripton	(Morgan Chapter)	Daniel M. Barber	(Morgan Chapter)
*Carol Weatherwax	(Auringer-Seelye Chapter)	*Stanley Wisniewski	(Metropolitan Chapter)
*Dorothy Taylor	(Auringer-Seelye Chapter)	*Matt Schreiner	(Metropolitan Chapter)
Henry Wemple	(Chenango Chapter)	*Bill Vermooy	(Orange County Chapter)
*Ted Whitney	(Chenango Chapter)	*Jack Littell	(Orange County Chapter)
*Charles Leeuw	(Chenango Chapter)	*Frank Davidson	(Orange County Chapter)
Dolores LaLock	(Houghton Chapter)	*Helene Dunbar	(Triple Cities Chapter)
*Charles Phillips	(Houghton Chapter)	Kingston Larner, M.D.	(Van Epps-Hartley Chapter)
*Charles Pierce	(Houghton Chapter)	*Charles Gillette	(Van Epps-Hartley Chapter)
Harrison Case	(Long Island Chapter)	Not represented:	Mid Hudson Chapter
George Morton	(Long Island Chapter)		Upper Susquehanna Chapter

*Alternates

Committee Chairmen:

Kingston Larner	Chapters & Membership
vacant	Fellowship & Awards
Hallock Wood	Local Arrangements
Ted Whitney	Nominating
Alfred E. Dart	Program
Ronald J. Pappert	Publications
Burn Aash (Deceased)	Finance

1. Roll call was taken.

2. Minutes were not read, but distributed to those present. Minutes were accepted as printed. Motion made by Dan Barber, carried.

OLD BUSINESS

3. Fellowship & Awards - President Hayes nominated Al J. Hoffman of Morgan Chapter for a Meritorious Service Award. Motion to accept was made by Henry Wemple. Carried unanimously.

4. Nominating - Report read by Ted Whitney, Chairman. Difficulty was experienced in getting more than one candidate to run for office. Motion made by Dr. Larner to accept the report. Carried. Dr. Larner commented on elections in professional organization. Then he made the following motion: Let the nominating committee ask the chapters for names of candidates, then choose one acceptable candidate for each office, then the membership by written ballot will confirm the choice of the nominating committee. Motion by Dr. Larner, Carried.

5. Program - Alfred Dart gave a report orally. He said that the printed program would have to speak for itself. He reported that he tried to keep the expenses low. The Long Island Chapter will try to pay all expenses. A motion was made by Ted Whitney to accept the report. Carried.

6. Public Relations - Dr. Gladys Haase reported that she had prepared newspaper releases for the annual meeting. She is going to expand the function in 1970 with the creation of a directory of interested persons and groups. Motion was made by Dr. Larner to accept the report. Carried.

Dr. Larner presented a motion to the effect that the Public Relation office make U.S. Senate Bill #2893 (Antiquity) better known throughout the Chapters. Carried.

7. Following discussion on public relations, a motion was made to change the Constitution and By-Laws to elect officers for a two-year term. Discussion followed including what it would take to change these laws. As a result the motion was dropped.

8. Chapters & Membership - Dr. Larner reported that because of the lack of petitions for chapter affiliation, there was no committee activity in 1969. Charles Hayes reported that a group in Syracuse, New York, may want affiliation. Motion to accept the report was made by Dan Barber. Carried.

9. Publications - Report was distributed in the absence of Chairman, Ronald Pappert. Briefly it included the following points:

- a. Bulletins 46 and 47 were distributed, with No. 48 in preparation.
- b. Recommend \$1200 appropriation for Bulletin in 1970.
- c. No further action taken on publication of Dr. Peter Pratt's, *The Archeology of the Oneida Iroquois* as a Researches and Transaction.
- d. Recommend other methods of financing publications.
- e. The next Occasional Paper will be published soon. (End of Pappert Report).

Louis Brennan led the discussion asking for 90 pages for The Bulletin at approximately \$13.33 per page or \$1,500 this year. Motion was made by Dr. Haase. Carried.

Review of the proposed *Researches and Transactions*. Dr. Peter Pratt's book is under consideration for publication. The Association has earmarked \$1,600 for publication. Van Epps-Hartley has offered \$500; Chenango Chapter as trustee for the Richard Bennett Memorial Fund has offered \$300; The Chenango Chapter itself has offered \$200 and Henry Wemple will investigate raising the remaining money.

The Association has earmarked an additional \$1,200 for this publication in case the remaining money is not forthcoming. Motion made by Dr. Larner. Carried.

Dr. James Tuck's Prehistory of the Onondaga Nation is being considered for a future *Researches and Transactions*.

10. Motion was made by Ted Whitney to send an appropriate Resolution to the Reverend Robert McNamara who served as an editorial advisor on the Occasional Paper (Stewart). Carried.

69-1-RESOLVED, That, on the basis of the recommendation of Ronald J.A. Pappert, the New York State Archeological Association hereby expresses its sincere appreciation to the Reverend Robert McNamara for the active role he played and the generous amount of time he gave as reviewing editor of the Occasional Paper, entitled FRENCH PIONEERS IN THE EASTERN GREAT LAKES AREA 1609 - 1791 by Alexander McGinn Stewart.

A motion was made by Mr. Leeuw to accept the publications report as amended. Carried.

12. Treasurer's Report - The Treasurer's report prepared by Nannette J. Hayes was read in her absence by Charles Hayes.

TOTAL BANK BALANCES

Checking Account:	\$1982.02
General Fund \$259.03	
Publication Fund \$1722.99	
Savings Account:	<u>\$1941.42</u>
Total:	\$3923.44

Memberships (as of April 24, 1970):	(1969)	(1970)
TOTAL Memberships	579	407
TOTAL Number of Individuals	702	513
TOTAL Publication Number	572	405

Motion was made to accept the Treasurer's Report as printed and distributed by Mr. Davidson. Carried.

13. Secretary's Report - Michael J. Ripton

Mailings sent 1969-70 included: 363 pieces -ballots, etc., 37 letters, etc., 34 post cards, 25 announcements, other special mailings @ \$38.50 postage.

Mimeograph and mail handling service, \$5.00.

Other duties included: Answered regular correspondence, inquiries, tallied Chapter attendance for annual meeting, gathered Chapter Officer Reports, prepared mailing for Annual meeting, ballots, candidates sheets and motel information. Sent motel post cards, announcements, and sent travel information concerning Long Island, as well as prepared the preliminary meeting notice. Prepared and sent NYSAA & ESAF Call for Papers (2 times). Sent out ESAF BULLETINS #27-28 to all Chapters and prepared and sent NYSAA entry in ESAF 69-70 DIRECTORY. Prepared and distributed Minutes of 53rd Annual Meeting, NYSAA - Buffalo, New York and prepared and distributed Executive Committee Membership List.

14. Charles Hayes commented on Lilita Bergs' activities during the year in distribution of the N.Y.S.A.A. Resolution Preservation of Archeological Sites and the proper methods of teaching archeology. The resolution was widely circulated.

15. Dr. Gladys Hasse proposed that the Eastern States Archeological Federation set up a calendar clearing house of annual meeting dates in their directory to avoid a conflict of dates among member societies. Motion. Carried. The president instructed the ESAF representative to bring this up at the ESAF meeting.

16. The ideas of "joint publication ventures" was brought up as a solution to rising editorial and publication costs. It was discussed that the Eastern States Federation tried this method without satisfaction. The discussion was dropped.

17. Charles Gillette mentioned that when N.Y. Senate Bill #8187 becomes law, the NYSAA will appoint a representative to review projects covered by this legislation. It was decided by Charles Hayes that the incoming president will appoint the representative.

18. The following resolutions were made:

1. Program & Local Arrangements Committees & Long Island Chapter - Henry Wemple.

69-2-RESOLVED, That the New York State Archeological Association hereby expresses its appreciation to Alfred Dart and the Program Committee, and Hallock Wood and the Local Arrangements Committee and to the Incorporated Long Island Chapter in general for their meritorious efforts in preparing for and executing all of the final details necessary for the successful 54th Annual Meeting of the Association.

2. Southold Savings Bank - Dr. Larner

69-3-RESOLVED, That the New York State Archeological Association hereby expresses its sincere appreciation to the Southold Savings Bank for the generous gift of printing the annual program of the meeting of the Association in Long Island, New York.

3. The Suffolk Times - Dr. Larner

69-4-RESOLVED, That the New York State Archeological Association hereby expresses its sincere appreciation to the "Suffolk Times" for the generous coverage of the story of the Incorporated Long Island Museum, the gifts of Roy Latham and the Annual meeting of the Association in Long Island, and be it further

RESOLVED, That the Association commends the "Suffolk Times" for their foresight and for the active role which they played in making known the importance of archeological investigations in Eastern New York State.

4. Burt Nash - Dan Barber

69-5-RESOLVED, That the New York State Archeological Association hereby expresses its sincere appreciation to Burdette Nash for the many years of service he so generously gave to the Association and its Lewis Henry Morgan Chapter and be it further

RESOLVED, That the Association hereby expresses its sincere appreciation that Mr. Nash named the Lewis Henry Morgan Chapter in his will.

19. Dorothy Taylor in the name of the Auringer-Seeyle Chapter discussed the problems of the modern day New York Indians and wanted it on record that the NYSAA should do something about the problem.

Discussion followed that the Association should get into the Indian problem area; that we should become politically active; that federal law prohibited nonprofit organizations from lobbying; that Chapters should do something on the local level; that the new president should study the problems. A resolution was written into the record and given to the membership to consider - Motion to this effect was made by Mr. Littell. Carried.

BUSINESS MEETING

1. The meeting convened at 11:00 p.m. E.D.T. A quorum was present.
2. The president appointed Drs. Larner and Haase as tellers to count the sealed ballots.
3. The minutes of last year's business meeting were approved as distributed and printed in The Bulletin. Motion by William Verwooy. Carried.
4. The committee reports as read at the Executive Committee were approved by motion by Charles Gillette. Carried.
5. Chapter reports as printed by Chapter secretaries were distributed to official chapter representatives,
6. Henry Wemple made a motion that the President and Secretary should be empowered to order extra Bulletins and ESAF Bulletins to make up for the shortage that occurs each year in Chapters where members join after publication's orders have been placed. Carried.
7. The resolution to amend Chapter VIII No. 2 of the By-Laws, previously tabled one year for consideration was reintroduced, discussed and defeated.
8. A proposal to raise the dues was made. Discussion followed and many suggestions were made to compensate the Association for its added costs. Proposals from \$1.00 to \$10.00 raises per member were suggested. It was suggested to form a committee to study the fiscal picture of the Association. Discussion ended and the following was put to a motion: The members present at this business should vote to suspend the By-Laws, and take immediate action on raising the dues right now. Motion made by Robert Hawkins, seconded by Charles Pierce. This motion was carried unanimously. (This action is permitted in the By-Laws, Chapter XII ~2.

Discussion followed on the formula for raising the dues: Dr. Hasse suggested raising dues: active from \$4, to \$6. H/W \$5. to \$7., Sust. \$6. - \$8. Student \$3. - \$3, and eliminating new life memberships. Dorothy Taylor proposed raising only three membership classes - active from \$4. - \$8., H/W \$5. - \$10., Sust. \$6. - \$10,

Fred Hawkins proposed the following motion. The following dues in the NYSAA be changed, active \$4. to \$6., Husband/Wife \$5. to \$7., sustaining, institutional \$6. - \$8. Student and Junior memberships remain the same on an annual basis. And that Life membership be considered in another motion. All additional funds collected by this raise would go to the Association. Motion was seconded by Miss Sizbenoski. Motion was defeated 20 to 13 votes.

Mr. Leeuw made a motion that annual dues on Active, Husband/Wife, Sustaining, Institutional, members be increased by \$1.00, that Student and Junior memberships remain the same and that Life memberships be considered in a separate motion. Increase in dues would be given to the Association. Motion was carried 28 to 3,

Mr. Leeuw than made a motion to raise new Life Memberships (one time payment) from \$40. to \$100, with 50% going to the Association and 50% going to the Chapter of the member. Motion carried 29 to 0.
9. Discussion followed on what each member would receive for his dues. This problem can only be solved by a common fiscal year for the Association and all the Chapters; otherwise a member may receive partial Association benefits and partial Chapter benefits. Questions were asked. Mr. Leeuw made a motion that the new president recommended to the Chapters that one common fiscal year become standard in all the Chapters. Henry Wemple seconded the motion. Carried.
10. Mrs. Helene Dunbar offered the invitation of the Triple Cities Chapter (Binghamton, N.Y.) as the next meeting site, if another location could not be found. No decision was made.

11. Tellers report of elections was announced:
- | | |
|-------------------------|-------------------|
| President | Michael J. Ripton |
| Vice President | Theodore Whitney |
| Secretary | William F. Fhlers |
| Treasurer | Nanette J. Hayes |
| E.S.A.F. Representative | Louis A. Brennan |
12. Mr. Hallock Wood made a motion to adjourn at 12:10 p.m. E.D.T.

Respectively Submitted,

Michael J. Ripton Secretary

A REVIEW

A Guide To Artifacts Of Colonial America by Ivor Noel Hume, Alfred Knopf,
New York 1970 323 pp., 100 figs. \$10.00

Of primary value to archaeologists, architectural historians, antique collectors and anyone else whose interests be in the every day objects and activities of colonial America, this book can be highly recommended. It is not, however, to be considered an encyclopaedic coverage. This fact is openly admitted by author Noel Hume, whose background in the subject certainly would qualify him to someday initiate such a project.

The book is introduced by an informative and often amusing section entitled "Signposts To The Past." Hume points out the many sources other than archeologically derived artifacts that one can refer to for background on colonial America. In a way this is related to the ethnohistorical approach of the anthropologist, but by no means does Hume attempt to bring contemporary anthropological thought into this book. Maybe when additional excavation has been accomplished and historical archeology approaches the prehistoric studies in terms of volume published, such an anthropological orientation will be possible.

"An Alphabetical Guide To The Artifacts" comprises the major part of the book. Subjects covered range from buttons to ceramics and include such unexpected items as wig curlers, chamber pots, bedpans and horseshoes. Each artifact category has a small bibliography that can lead one deeper into the subject. It appears that some artifact discussions are in considerable more detail than others of perhaps equal magnitude. This is undoubtedly a direct result of Hume's background and interests. Ceramics, glassware, smoking pipes and furniture hardware, for example, are more thoroughly discussed than firearms or glass beads. If one were to include the trade items that the Indians obtained from colonial America, this book has to be called inadequate in many areas such as axes, brass kettles, glass beads, and copper bracelets. Although it may be argued that these are specialized categories, it cannot be denied archeologically that these artifacts show up on colonial sites of both Indian and non-Indian occupation.

From the point of view of northeastern North America as a whole, Hume has not covered the area completely. At this point in historical archeology it is doubtful if anybody could attempt such a task. It is only fair, however, to point out that the emphasis is upon the middle Atlantic coastal areas of Virginia and North Carolina. In terms of time the book goes somewhat into the early 19th Century. This will be particularly of interest to investigators in areas of northern Pennsylvania, New York and Ohio. Here the late colonial period and the first part of the 19th century represent the earliest years for non-Indian settlement.

The importance of this study of the artifacts from colonial daily living should help to increase both the understanding and the interpretation of this period in America. The many heretofore unrecognized and sometimes forgotten objects which are not of strictly aesthetic value will now be brought into their proper perspective. This is a companion volume to Historical Archaeology (Alfred Knopf, 1969) by the same author. Between the two volumes the relatively new field of historical archeology can be introduced to a variety of potential readers in many fields. A Guide To Artifacts Of Colonial America is a basic reference book which may set a precedent for future reporting on a wider scale.

Charles F. Hayes, III
Lewis H. Morgan Chapter.