

THE



BULLETIN

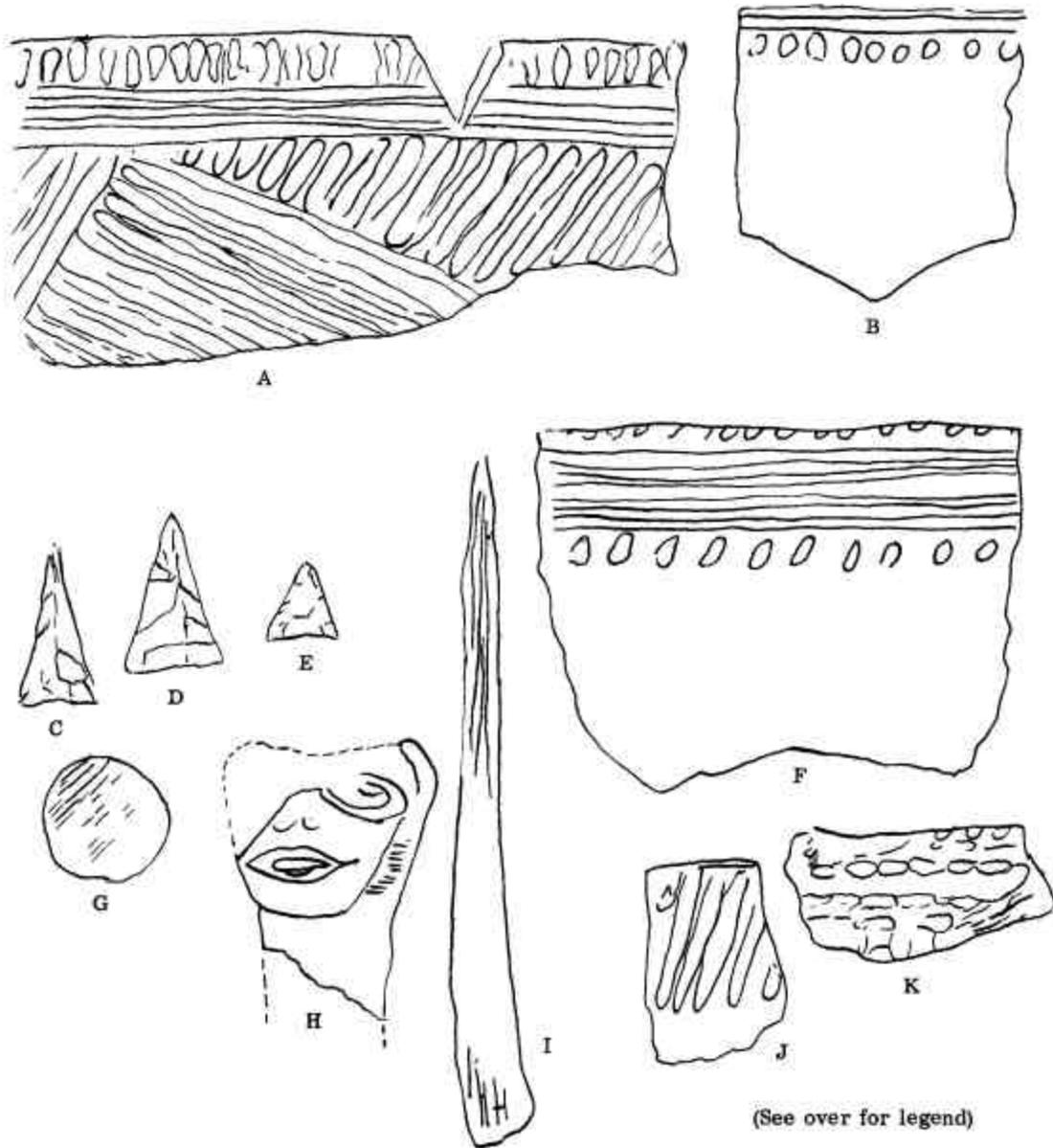
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(See over for legend)

## EXCAVATIONS AT THE ATWELL FORT SITE, MADISON COUNTY, NEW YORK

Robert Ricklis

Morgan Chapter

During the past century, the prehistoric and early historic Iroquois sites in Onondaga and Madison counties have been subject of the careless excavations of the pothunter. The fact that the numerous excavations on these sites have been small and restricted accounts for the scattering of the large amount of unearthened material into many small collections. As a result, it is difficult to make any valid statements concerning the people who occupied the sites.

The Atwell Fort, which lies about fifteen miles southeast of Syracuse, is one such site. During the past summer I undertook excavations with the hope of obtaining a sample of artifacts large enough to enable me to draw certain conclusions relating to the site's temporal position and cultural identity.

In the village area which is approximately 700 feet long by about 300 feet at its widest point, I staked out a grid system of five foot squares. The grid base line was connected to a large apple tree. Excavation was conducted in three hillside refuse areas. The largest of these, in which thirteen sections were dug, was about thirty feet long by twenty feet wide and was situated on the south side of the hill. Here a line of ten post molds was uncovered. It ran in a nearly east-west direction across the hillside, about fifteen feet downhill from and parallel to the edge of the hilltop. The molds ranged in diameter from four to fifteen inches, in depth from eleven to twenty-four inches, and were eight to thirty-six inches apart. These post molds evidently represent a defensive stockade line. Two smaller refuse middens, both on the opposite side of the hill, were dug to a lesser extent.

Artifacts are for the most part typically Iroquoian and fall into the following categories; chipped stone, bone and antler, ground stone, rough stone, pipe, ornamental and pottery.

A total of twenty-two chipped stone artifacts were found. Projectile points, which number sixteen, are, with one exception, of the small, thin, triangular variety. The atypical point, although lanceolate in shape, appears to be a product of the makers of the other points as it is small, thin, and finely chipped. Five scrapers and a flint drill complete the list of artifacts in this category.

Ground stone artifacts include celt fragments and gaming stones. Celts are made of hard crystalline rock and are roughly smoothed by grinding after having been pecked into their general shape. Small round stone disks which may have been used as gaming stones are made of shale and sandstone.

Bone implements occurred quite frequently in the refuse and are for the most part splinter awls. Four complete and numerous fragmentary awls were found. A rib section, possibly deer, is ground on one end and may have been used as a pottery mar-

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 THE ATWELL FORT SITE

- |   |                                      |
|---|--------------------------------------|
| A. Rimsherd of Onondaga Triangular type       | G. Gaming Stone                      |
| B. Rimsherds of Otstungo Notched type.        | H. Fragment of pipe bowl             |
| C. Projectile points                          | I. Bone Awl                          |
| D. E. F. Rimsherd of Ontario Horizontal type. | J. Rimsherd of Syracuse Incised type |
| K. Rimsherds of Iroquois Linear type          |                                      |

ker. An antler section with its tip ground to a wedge shape could have served as a chisel.

Personal ornaments include one flat pear-shaped bead or pendant, 3/4 inch long by 1/2 inch wide and made of pink slate, a discoidal perforated shale bead(?), two small shell beads about 1/4 inch in diameter, and a ceramic human face pendant 7/8 inch long and 11/16 inch wide.

Although pipe fragments are quite numerous, most pieces are small and consequently less than a dozen fragments reveal the type of pipe of which they were a part. Rather surprising is the small proportion of trumpet pipe fragments in relation to the number of barrel type bowls. An interesting bowl fragment displays a human face effigy (illustration, figure H).

Rough stone artifacts consist of combination hammer-anvil-stones and small flat pebbles exhibiting scratches on one or both surfaces. The purpose of these scratches is unknown.

Potsherds occurred profusely in every midden. Body sherds are almost exclusively smooth, tempered with grit, well-fired, and orange, brown, or black in color. Decoration was commonly executed by incising, but rarely by linear design, punctate, or fingernail impression. Vessels seem to have had globular bodies, constricted necks and rims with or without collars. Collared rims were by far the more common and appear to have occasionally been bent at an angle under castellations so as to give the mouth of the vessel a polygonal rather than a round perimeter. Appendages such as human effigy faces and figures and handles occurred occasionally. The occurrence of such items is common in the Onondaga and Oneida cultures.

Unfortunately most potsherds are small. For this reason the sample of pottery types is small. Below is a seriation of pottery types found and although it is limited in accuracy by its size, I believe it serves to demonstrate general pottery trends.

#### Types Common To The

#### Onondaga and Oneida Cultures 1

	<u>Number</u>	<u>Percentage of Types</u>
Onondaga triangular 2	14	29.4
Ontario Horizontal	5	10.5
Lawson Incised	3	6.3
Roebuck Low Collar	3	6.3
Fonda Incised	1	2.1
Syracuse Incised	1	2.1
Iroquois Linear	1	2.1

#### Types Common to the Mohawk Culture

Otstungo Notched	5	10.5
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Rice Diagonal	5	10.5
Wagoner Incised	2	4.2

Types Common to the Huron Culture

Seed Incised	1	2.1
Huron Incised	2	4.2

Types Common to Cayuga Culture

Cayuga Horizontal	1	2.1
Ithaca Linear	1	2.1

Types Common to Seneca Culture

Dutch Hollow Notched	2	4.2
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Total	<u>48</u>	<u>98.7</u>
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1. All types described by Richard S. MacNeish in Iroquois Pottery Types.
2. A number of these sherds lack the short vertical impressions directly under the rim as seen on figure A.

A particular rimsherd, which did not fall into any of the types described by Dr. MacNeish, is shell-tempered and has a brown exterior and a black interior. The design consists of three horizontal incised lines just below the rim under which there is a horizontal row of short (1/4 inch) vertical impressions. Under this series of impressions appears a pair of horizontal lines. This decoration of alternate pairs of incised horizontal lines and rows of vertical impressions continues past the lower edge of the potsherd. Two other shell tempered pots are represented by several potsherds. The shell tempering of these sherds suggests that they may be of Susquehannock origin.

The majority of the typed rimsherds are common to the Onondaga and Oneida cultures. Onondaga Triangular by far outweighs any other single pottery type.

The pottery types common to other Iroquoian groups indicate relationships with those cultures. Relationship with the Mohawk culture seems to have been the most extensive as is suggested by the occurrence of Otstungo Notched and Rice Diagonal, both notched lip types, and Wagoner incised. An explanation for the fairly large number of Mohawk type potsherds may lie in the fact that the Onondaga, Oneida, and Mohawk cultures may have had, in part, a common base, a theory suggested by Dr. William A. Ritchie (Ritchie 1952:27). Lesser relationships with the Huron, Cayuga, and Seneca are indicated by the pottery seriation. Lawson Incised, considered by Dr. MacNeish to be a Neutral type, is also considered by him as a minor Onondaga and Oneida type.

The occurrence of an Iroquois Linear potsherd, a type evidently confined to the very earliest stages of Iroquois prehistory, poses an interesting problem, in that the Atwell Fort is apparently a very late prehistoric site, as is suggested by modeled human effigy faces on pottery, lack of cordmarked or check-stamped pottery, and a great variation in collar size and rim design. Perhaps there was more than one period of Iroquois occupation of the site, although this postulation finds fault in the fact

that the potsherd in question was found in no particular stratum that contained similar pottery.

The Atwell Fort seems to have been occupied by people of the Onondaga-Oneida culture after they had moved into the area from the vicinity of Watertown, New York and adjacent Canada, where such sites as Roebuck and Hochelaga (seen by Cartier in 1535) were occupied.

The term Onondaga-Oneida has been applied by Richard S. MacNeish to prehistoric sites which have yielded artifacts very similar to those (native made) found on both historic Onondaga and historic Oneida sites. According to Dr. MacNeish, the people having this culture migrated south into the Syracuse area just before the dawn of the historic period and somewhat simultaneously split into the separate tribes of the Onondaga and the Oneida (MacNeish 1952:84).

Assuming that the MacNeish hypothesis is basically sound, the question arises of whether the Atwell Fort was inhabited by Onondagas or Oneidas. The answer to this question is difficult to determine as the Onondaga and Oneida are, archeologically, extremely similar.

However, I do believe that the site is Onondaga. This postulation finds support in the following facts: (1) Onondaga triangular is a very popular type in the historic Onondaga, whereas it is a much more insignificant type in the historic Oneida, and thus, if the Atwell Fort were Oneida, there would probably tend to be a smaller percentage of Onondaga Triangular; (2) The Thurston horizontal pottery type which constitutes fifty percent of the pottery at the historic Oneida Munnsville Site and but a mere two per cent at the historic Onondaga Pompey Center Site (MacNeish 1952:67), is entirely lacking (at least none was found) at the Atwell Fort; (3) The Atwell Fort is in the heart of early historic Onondaga territory.

In regard to the date of occupation, the fact that the Atwell fort was occupied after the southward movement of the Onondaga-Oneida culture suggests a date later than that of the Canadian Hochelaga village of 1535. This, coupled with the fact that the site yielded absolutely no European trade goods indicates a time of occupation between 1550 and 1585. Careful, well-recorded excavation of the several prehistoric Iroquois sites in the immediate vicinity, which are probably of the same culture and time period, would almost certainly aid in pinpointing this tentative date, as it might be possible to construct a logical sequence of sites leading up to the historic period.

### References

MacNeish, Richard S., Iroquois Pottery Types, Bulletin 124, National Museum of Canada, Ottawa. 1950.

Ritchie, William A. , The Chance Horizon: An Early Stage of Mohawk Iroquois Cultural Development, New York State Museum, Circular 29, Albany. 1952.

NOTE: Reprinted from Morgan Chapter Newsletter Notebook, February 1963. The author, a high school student, has here achieved a report by which almost any amateur archaeologist could profit by heeding its assembly of data and statement of conclusions implicit in the data.

A SHORT EVALUATION OF THE CURRENT STATE OF KNOWLEDGE OF NEW YORK  
PREHISTORY STATED IN TERMS OF THE PROBLEMS RAISED BY IT\*

Louis A. Brennan

Metropolitan Chapter

It has been well over a decade since the last published appearance of a summary or updated restatement of our knowledge of the prehistoric occupations of the geographic regions that fall within the State of New York. In 1951 there appeared in the October issue of *American Antiquity* Dr. William A. Ritchie's authoritative crasis of the results of his two decades of archaeological investigation of central New York under the title "A Current Synthesis of New York Prehistory."

The achievement of this work was to establish the succession of New York aboriginal cultures from what was then thought to be the early Archaic, but would now be regarded as Middle Archaic, to contact and post contact times in chronological order within the Midwest or McKern taxonomic system. The general culture sequence of New York was given as:

Archaic I--represented by the Lamoka Focus sites

Archaic II--represented by the Laurentian Phase

Archaic II--represented by the Frontenac Island Focus

Transitional and Early Woodland I--represented by the Piffard Focus of interior New York and the first appearance of the Windsor aspect of the Coastal phase in the Orient Focus

Early Woodland II--represented by a continuation of the Coastal Windsor and by the Vine Valley Aspect of upper New York which initiated the series of Point Peninsula Foci.

Early Woodland III--represented by the New York focus of a Hopewell phase

Middle Woodland I--represented by continuation of both Windsor and Vine Valley aspects

Middle Woodland II--represented by the termination of the Vine Valley aspect in transition to the Late Woodland

Late Woodland I--represented by the first recognition of the Owasco Aspect of the Northeastern Phase

Late Woodland II--represented by continuation of the upper New York Owasco Aspect and the first appearance of the East River Aspect of coastal New York, both

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\*Read in part at the 1963 Annual Meeting of the New York State Archaeological Association, Rochester, April 6.

of the Northeastern Phase, and a reappearance of the Windsor Aspect of the Coastal phase.

Late Woodland II--represented by continuations of the East River and Owasco Aspects of the Northeastern phase, and the Windsor Aspect of the Coastal phase.

Late Woodland III--represented by terminations of the foregoing phases and by aspects of transitional features

Late Woodland IV--represented by the Iroquois Aspect of the Northeastern Phase

Late Woodland V--represented by the East River Shantok and Iroquois Aspects of the Northeastern Phase

This sequence has been both extended and amplified in the twelve years since its publication. In 1957, in his "Traces of Early Man in the Northeast" Ritchie placed the fluted point evidence of a paleo-hunter period between 3500 B. C. and 5000 B. C. which would fix the upper limits of the fluted-point hunters as approximately contemporary with the Champlain Sea. However, in his 1958 resume of the archaeology of the Hudson Valley, "An Introduction to Hudson Valley Prehistory, " Ritchie separates in time the paleo-hunter fluted point makers from the Lamoka focus thus: "Of the nebulous interval of perhaps only 1500 years between the fluted point users and the makers of the Lamoka or Lamoka-like points, we are at present completely ignorant. Is it possible that the gap was partly filled by another wandering hunter group who left behind the relics pictured on plate 31?" The 'relics' pictured on plate 31 are points identified as Steubenville stemmed and lanceolate types.

In 1959 there appeared Ritchie's confirmation of the Archaic-to-Transitional character of the Orient Focus in the light of the then recently excavated Stony Brook site in his study, "The Stony Brook Site and its Relation to Archaic and Transitional Cultures on Long Island." A cluster of C14 dates for the Stony Brook, the Sugar Loaf Hill, and the Orient sites fixed the chronological position of the terminal Archaic-incipient Woodland at about 3000 B. P. and the excavated materials not only related habitation sites to the Orient burial complex, but provided a firmer definition of the Transitional.

The publication in 1961 of Ritchie's "A Typology and Nomenclature for New York Projectile Points" was, by implication, a reiteration, in terms of culturally related stone projectile point types, of the scheme of cultural succession proposed in 1951 with the minor modifications just stated. Despite the fact that in his description of the Clovis fluted point Ritchie mentions the approximately 9000 year age of the Bull Brook, Mass. fluted points, in his introductory first paragraph in the "Typology" he states, "... projectile point succession, as currently known, spans a period of about 5, 000 years before the present. "

The arrangement of New York prehistory, almost totally the work of Ritchie, with certain contributions on coastal New York by Carlyle S. Smith (1950), as we now understand it, is as follows:

(1) The primary residents in New York were the Clovis fluted point-making Paleo-

hunters of 9, 000 B. P. ;

(2) Either there was a long hiatus between this residency and the earliest Archaic occupation at Lamoka Lake at 5500 B. P. or a very thin scattering of fluted point makers lingered on for some 3500 years. The Steubenville point types, found in New York with pottery (Christman and Johnson, 1960) obviously do not fall within this hiatus.

(3) The Lamokans of the earliest Archaic must have been closely followed by the Laurentians, since the Frontenac Island culture, posited as acculturation of Lamokans and Laurentians, has been C14 dated at about 5000 B.P. A C14 date for what is believed to have been a Laurentian manifestation at Bannerman's Island in the Hudson River just south of Beacon is approximately 4500 B. P.

(4) The Archaic enters the Transitional period at about 3500 B. P., with the earliest pottery appearing at about 3000 B. P.

(5) The Woodland or ceramic succession of periods divides into parallel cotraditions of Coastal New York and the Point Peninsula series of foci in upstate New York in which was rooted the Owasco-Iroquois heritage.

(6) The Hudson Valley was a mid-ground subject to alternating influences from coastal New York and interior New York.

A comparison of this New York scheme of cultural succession with recent developments in archaeology outside of New York gives rise to a list of questions which may be stated as problems that must be solved if the scheme is to continue to be persuasive. Some of these question-problems are:

(1) Is there in New York a pre-stone or non-stone projectile point horizon of Paleolithic or, to use the American term, Unspecialized Lithic character? John Witthoft, in his "The Archaic of the Appalachian Region" (1959) has described a pre DeTurk Industry manifestation in Pennsylvania, which consists of large choppers, planes, and picks, but no projectile points. Douglas Byers, in his "The Eastern Archaic: Some Problems and Hypotheses" (1959), has designated as the Kelley Phase a non-stone projectile point, percussion flaked lithic manifestation discovered at the Smith Farm, Ellsworth Falls, Maine, a foot below a level C14 dated at about 4000 B. P. Both Witthoft and Byers have made reference, in their reports on these materials, to Greenman's George Lake site and Lee's Sheguiandah site on Manitoulin Island, both in Ontario. Witthoft has also referred his percussion flaked pre-DeTurk tools of Clactonian technique to the materials from Tule Springs, Nevada, and Byers has found parallels to the Kelley Phase in the Paleo-lithic-looking Topanga Canyon culture of California.

In New York this author, (Brennan, 1962) in company with Mauck Brammer and Sigfus Olafson, all of Mid-Hudson Chapter, have observed at our Parham Ridge site on the Hudson a section which yielded only Paleo-lithic-looking large tools produced by what has been called the bust-off technique. The lowest level in stratigraphic position at Parham Ridge was one 8 inch soil horizon older than the steatite bearing top midden and produced stone projectile points but very sparsely. If there were an even older occupation present it might well have been non-stone projectile point in character. Since this suspected Paleolithic culture was not in stratigraphic position, its presence cannot be proved. Byers statement that "It is possible that remains of Unspecialized Lithic cultures

will be found widely distributed in the East" certainly poses for us in New York a responsibility for closer and more careful investigation of the possibility of an Unspecialized Lithic horizon.

(2) Our second problem-question is: were there not in New York from earliest post glacial times, two cultural traditions, one the specialized hunter and maker of fluted points and the other unspecialized usufructian or hunter-gatherer?

The contemporaneity of the big game herd hunters of extinct animals and unspecialized hunter gatherers has already been established for most other regions in the United States by C14 dates; for Oregon at the Dalles sites; in the Great Basin-High Plains by the Danger Cave, Fort Rock Cave, the Winnemucca Caves, and others; for the Oklahoma area by Graham Cave; for the upper Mississippi Valley by Modoc and Raddatz Rock Shelters; for the southeast by Russell Cave and the Stanfield-Worley Rock Shelter. These cave sites have all yielded dates in lowest levels in excess of 9000 years and several in excess of 10,000 years. Of particular relevance to New York is the Raddatz Rock Shelter in Wisconsin, (Wittar, 1959) since Wisconsin quite closely approximates New York in latitude and paralleled it in glacial advances and retreats. Fireplace charcoal from Raddatz gave a date of about 10,700 B. P. plus or minus 600 years. The earliest artifacts occurred at the level of about 9500 B. P.

It does not seem in the least credible that there were residents in Wisconsin living a cave-dwelling, usufructian life 9500 years ago, and that the Old Copper culture had achieved its distinctive tool industry and burial culture 7500 years ago, while New York State was not occupied by hunter-gatherers until 5500 years ago. We are now certain that New York did sustain human life at least 9000 years ago, since that is the date assigned to the fluted point site at Bull Brook, Ipswich, Mass. as an average of several C14 runs. Byers has told a colleague of the author, Mr. Olafson, that this date is probably minimal, since the charcoal dating sample from this open site had almost certainly been contaminated toward recency. By the time value of 8000 years plus set by Jack L. Hough in his "Geology of the Great Lakes", (1958) for the early stage of the so-called Champlain Sea or St. Lawrence Marine Embayment, the fluted point makers of the Reagen site in Vermont, excavated by Ritchie, (Ritchie, 1954) quite likely hunted upper New York before 8000 B. P.

On the archaeological map the Northeast remains almost alone in affording no site material of usufructian, that is, hunter-gatherers, living contemporaneously with big game hunters, or at least makers of types of points, fluted or otherwise, elsewhere associated with kills of extinct big game. Such a situation requires explanation. It will be noted that few cave or rock shelter excavations are reported in the literature of the Northeast, and there can be little doubt that this kind of site, since the introduction of C14 dating a most significant locus of information, has been somehow neglected. Harrington excavated Helicker's Cave near Armonk, Westchester County, in 1900 and Finch's Rock House in the same vicinity in 1909 (Smith, 1950). Until Robert Funk and Arthur Johnson (1962) reported on the Taghkanick Rock Shelter near Hudson, in 1962, mention is lacking of caves and rock shelter sites, and there has apparently been no deliberate search for any with the deep deposits that will provide a chronological column of occupation.

The cave nearest New York which promises to yield occupational evidence to a time depth equal to Raddatz, Modoc, Russell etc., is Sheep Rock Shelter (Stackhouse and

Carl, 1962) in Huntington County, Pennsylvania. Excavation is apparently not complete and published reports are scanty, but digging has reached a 22 ft, depth, about what was reached at Raddatz and Russell, but not quite as deep as Modoc's 27 feet. Pre-ceramic occupations begin at 3 feet and at 5 feet, a burial was uncovered at a level estimated at 6000 B. P, with Bare Island points under a Brewerton-like horizon.

Somewhat nearer home the Cohannet Chapter of the Massachusetts Archaeological Society, excavators of the 4200 year-old Archaic village designated Wapanucket No. 6, have been excavating a site designated Wapanucket No. 8, a few hundred yards away. It has yielded fluted points apparently coeval with a red ocher-using complex of large point-like blades and side-notched points like those discovered with the Simonsen site (Agogino, 1957) bison kill in Iowa, C14 dated at about 8500 B. P. There is no doubt that the non-fluted point manifestation at Wapanucket No. 8 is appreciably older than the Wapanucket No. 6 village. A C14 date on charcoal from Wap 8 taken last summer is 4710 B. P. , and a column of dates may eventually be built up at this site to measure Massachusetts prehistory.

It should also be mentioned that Byers believes that the earliest level at the E. D. Prey site is the Unspecialized Lithic of the Kelley phase plus stone projectile points, thus affording continuity from a Paleolithic type industry to the following Archaic type.

A situation where fluted point hunters and usufructians were coeval has been described by T. M. N. Lewis and Madeline Kneberg in their "The Archaic Culture in the Middle South" (1959). The Eva Phase of the Archaic of Tennessee has been C14 dated at about 7200 B. P. and was certainly older since this date is not from the lowest level. Lewis and Kneberg regard the Eva Phase as having been contemporary with the fluted point makers of Tennessee and of Alabama, which has produced more fluted points than the rest of the country put together. They write, "The two groups reveal different patterns of ecological adjustment; the Early Lithic peoples (the fluted point makers) were nomadic hunters and collectors, and the Archaic (that is, usufructian cultures) were sedentary hunters and collectors. The Early Lithic peoples probably hunted prairie fauna while the Archaic peoples hunted forest fauna.... Summarizing the subject of possible interrelationships between Early Lithic and Archaic, it is our belief that the groups were coeval in part, but that there was little or no interaction between them. We can see no evidence of any developmental sequence or continuity between these two cultural stages in the area studied.... "

It now becomes clear that the primacy of the 5500-year old Lamoka people as New York's first Archaic settlers or usufructian culture cannot be regarded as proved or final until the excavation of one or more deep deposit sites. Those of us who have sifted for years through the thin and disturbed New York soils have little hope that a deep deposit site of undisturbed stratigraphy, with uncontaminated datable material can be found anywhere except under a rock overhang. The whole time span between Lamoka backward to the earliest post glacial habitability of the state is relatively unexplored. If nothing else had brought people into the Northeast during this hiatus, the onset of the Altitherman warm period at about 7000 B. P, would have opened up the game and vegetation rich larder. Deep site discovery and excavation is certainly project No. 1 for the remaining years of the 60's. A deliberate concentration on the excavation of rock shelters and of deep shell midden deposits before these are all destroyed is a cardinal problem of New York archaeology.

(3) Our third question-problem is: must the McKern taxonomic system be expanded or abandoned as a way of ordering the cultural phases of New York prehistory.

Perhaps the most obvious conclusion about Ritchie's work in New York is how remarkably it holds up in broad outline for the whole of this rather sprawling and geographically varied state, the boundaries of which are political, not physiographic. A shell midden site dug by Brammer, Brennan, Gahan, Olafson, and Schottler in 1962 gives testimony to the way in which the succession of cultures worked out by Ritchie, as predicated on projectile point types, repeats itself in the Hudson Valley.

The oyster shell of this midden site, called Oscawana Island #2, had been thrown over a 6 ft. terrace-bank of an embayment of the Hudson, so that the midden itself was the bank. The artifacts, all lithic, occurred as usual at the midden edge, both within and just outside it. The plentiful chippage just outside indicated the location of the camp sites. But the soil of this camp area, being on a slope of about a 20% grade, was so deflated by runoff that there was no stratigraphy. As we dug upslope, however, a kind of horizontal stratigraphy or succession seemed to manifest itself. At the bottom on the slope, on the edge of the bank where the earliest part of the midden had been deposited, the projectile points were narrow, stemmed points of the type usually called Lamoka; the next group were of the so-called Normanskill type; next, under the midden, came a Vosburg and Brewerton corner-notched; outside the midden, at about the same upslope position were several points of Brewerton side-notched design; next beyond was a single probable Meadowood; then came a Susquehannah; then some tab-stemmed points most resembling Poplar Island Points; and finally, at the top of the slope, there were fishtails.

A road cut across the midden here, and the single sherd of pottery discovered is regarded as having pertained to an even higher, later occupation. That part of the midden that we were able to examine was, therefore, pre-ceramic, and the points within it were well-established New York pre-ceramic styles in acceptable sequential order.

Similarly, the established New York pottery tradition, from a Vinette I beginning, followed by a Vinette II and by what seems to be, although our pottery occurrences are too scattered to be reliable, the recognized Point Peninsula series, is indubitably present in this area, with some evidence of pottery more closely related to the south.

But the very fact that all this evidence and the scheme by which it has been synthesized have repeatedly demonstrated its validity has its dangers. The tendency to stuff or force all data into the scheme as it now exists is inevitable. The McKern taxonomic system has both its uses and misuses. It can be applied in one of two ways, as a broad chronological stratification, or as an arrangement of a succession of cultural changes, but it cannot be safely used over a wide area embracing distinctly different physiographic regions in both ways at the same time. There is an example that will illustrate this: Lewis and Kneberg have assigned their Ledbetter phase of Tennessee to the Archaic and given its duration as between 1200 B. C. and 500 A. D. But by 500 A. D. the Hopewellians of Ohio and Illinois, who are assigned a beginning date of about 400 B. C. and are regarded as Middle Woodland, had waned, and the end of Middle Woodland was at hand before the Ledbetter Phase of the Archaic had ceased.

Even more disconcerting results ensue when it is attempted to relate chronological position by means of diagnostic cultural materials over considerable distances. For

instance, the Steubenville stemmed and lanceolate points which William Mayer-Oakes found early in the Panhandle Archaic of the upper Ohio Valley and which Ritchie suggested might fill the hiatus between the fluted point hunters and the Lamoka occupation, have been discovered by Arthur Johnson (1960) and E. B. Christman in the Hudson Valley in context with ceramics. And again, this author is not aware of any reported association in New York of Susquehanna, Perkiomen, or Lehigh broad points with steatite pots, diagnostic of the Transitional; certainly these are present in the lower Mid-Hudson area of Croton without ceramic or steatite association. Yet, in Pennsylvania, the steatite pottery of the Transitional invariably accompanies them.

If the McKern system is to work at all, the local sequence must be determined first and fixed by at least a few C14 dates; only then can it be adjusted to the system. It is very dubious procedure to build up the local sequence, for instance, in central New York and to equate this by similarity of artifacts or traits to either the Hudson Valley or Coastal New York. A decade ago, before C14 dating was authenticated, this was probably permissible. The assumption was that the Archaic cultures had come each more or less intact from Asia (see Don Dragoo's "Archaic Hunters of the Upper Ohio Valley," 1959) and had rather quickly spread through relatively unoccupied territory by simple line of march along natural travelways. Thus it seemed eminently reasonable, at least it did to this author at the time, that venturesome or surplus Lamoka populations followed down the Hudson to Coastal New York, and that Lamokans were followed by the Laurentians carrying their culture unmodified, to be followed in turn by the Point Peninsula Folk. Through such basically related populations, very much alike in every way and speaking dialects of the same language, trait diffusion would be rapid and uniform, and the central New York sequence would hold, with no significant time lags, for coastal, Hudson Valley, and upper New York.

The advent of C14 dating killed this view instantly. Ritchie was among the first to note this in his "Ground Slates: Eskimo or Indian?" (1951a) in which he pointed out the C14 dates made it impossible for rubbed slate points and ulus to have passed from the Dorset Eskimo to the Laurentian and related cultures of the Northeast. Instead, since ground slates were at least two millenia older in the Northeast than among the Dorset Eskimo, the trait passage must have been in the opposite direction, from south to north.

Suddenly we were faced with a 180 degree turn in the direction from which new populations must have entered upper New York, and we had to reckon with the cycles of post glacial climate to explain the dynamics of population spread. It has been more than adequately attested over the past tenyears, at Russell Cave, at the Stanfield-Worley Rock Shelter, in the Eva Focus sites and in the Pickwick Basin shell middens, that there was a widespread hunter-gatherer population in the South during pre-altithermal times. Even if this population had not begun drifting northward before this, the warmer-than-present Altithermal certainly set off such movement. When the trend northward along the coastal plain and eastward slopes reached the Bay of New York, it had a choice of continuing straight up the Hudson Valley or veering to the starboard, up the New England coast. Thus bifurcation was forced on the New York Archaic.

This is but one possible direction of immigration. There is also attested at Raddatz Rock Shelter, the Old Copper sites and Modoc Rock Shelter that in pre-Altithermal times the territory west of New York likewise had its hunter-gatherer population. If

New York had, prior to this time, not been attractive to these sedentary hunter-gatherers, as Lewis and Kneberg designate them, it became so during the Altithermal, or from about 7000 B. P. onward. We do know from the appearance of copper in the Northeast and from the use of red ocher in Old Copper burials, that there was contact with New York from this direction.

The upper New York sequence, then, must be the result of migration and trait diffusion from the south, up the Hudson, and probably up the Allegheny drainage and from the west along the lake plain. The prehistory of neither the Hudson Valley nor coastal New York can be safely assumed to be a duplicate of it. Lamoka is a perfect illustration of what is meant there. Elements of several cultures fused in the Lamoka Lake vicinity to create its uniqueness. The small, narrow, stemmed points in its projectile point inventory are present very early in the Hudson Valley, and it is possible that this trait came from that direction. The longer, narrow bladed points may have derived from the Bare Island type of Pennsylvania, or even from the Ohio Valley; it is possible that they represent more than a projectile point type and suggest a weapon trait. The broad stemmed broad-bladed knives of Lamoka occur in the Hudson Valley with what Dragoo has called basic Laurentian and may have been adopted from an early Ohio Valley people. The polished bevelled adzes, the one polished stone trait, are too plainly related to the much more widely practiced polished stone of the Boreal Archaic of New England. The choppers, being ubiquitous, could have come from anywhere. The tally sticks are, as far as this author knows, peculiar to Lamoka. The situation is clear. Unless a people of surpassing genius developed the Lamoka culture and acted as a culture center exporting single traits, it must have been a local product of an acculturation of peoples who preceded it in the area.

The Laurentian shows distinct signs of being similarly composite, and if the Frontenac of the Archaic III stage is, as has been hypothesized, an acculturation of Lamoka and Laurentian, it could not have occurred anywhere else by definition, since Lamoka occurred no place else.

The Archaic as designated in Ritchie's 1951 synthesis of New York prehistory cannot apply, then, to the Hudson Valley, to coastal New York, and probably, not to northeastern New York. What the Archaic was in these areas has yet to be described. It is undoubtedly of a complexity that will take many years to disentangle, since climatic fluctuation from about 7500 B. P., with the swings from warm to cool as shown by the Fairbridge chart printed in NYSAA Bulletin 25, (Brennan, 1962 a) must have given to and taken away from the food environment with a restless hand.

The final New York problem comes down to this, first to find the Archaic of lower New York and then to relate it to the Archaic already known and yet to be discovered in upper New York in such a way that the two are not merely chronological equivalents but interacting forces. That the Archaic of the Hudson Valley and lower New York was strictly appendage to the Archaic of upper New York is unthinkable after the work done in archaeology and post glacial geology of the last decade.

We cannot continue much longer to cram all our material into the McKern classification system as set up by Ritchie for New York in 1951. At that time the Ritchie synthesis provided New York with the most accurate, detailed, and advanced crisis of state-wide prehistory for any region north of the Valley of Mexico. But we have added nothing to it since then. What must be added has been briefly outlined in this paper: (1) what preceded Lamoka in New York; (2) what was the Archaic and pre-Archaic situa-

tion in the Hudson Valley and coastal New York; (3) what was the effect of the Archaic of more southerly regions and more westerly regions on the upper New York Archaic and the subsequent Woodland. It is not intended to overlook the effect of the New England Archaic on New York, but what has been assumed here, as a working hypothesis only, is that population and cultural trends moved into the Northeast from the West and South. Almost the only alternative to this, considering the glacial situation up to about 7000 B. P., is trans-Atlantic influence, presently unacceptable to archaeologists.

What must be reluctantly concluded is that the knowledge of New York prehistory has advanced very little since Ritchie laid the firm foundations over a decade ago.

#### BIBLIOGRAPHY

- Agogino, George A. and W. D. Frankforter "A Paleo-Indian Bison-Kill in Northwestern Iowa," American Antiquity, Vol. 25, No. 3 (1960) Salt Lake City
- Brennan, L. A. "The Q Tradition and the G O Horizon," The Bulletin, N. Y. S. A. A. No. 24, March (1962)
- \_\_\_\_\_ "Fairbridge's Sea Level Fluctuations," The Bulletin, N. Y. S. A. A., No. 25, July (1962a)
- Byers, Douglas A. "The Eastern Archaic: Some Problems and Hypotheses," American Antiquity, Vol. XXIV, No. 3 Salt Lake City (1959)
- Christman, E. B. and R. Arthur Johnson, "Steubenville Type Points in the Mid-Hudson Valley," The Bulletin, N. Y. S. A. A. No. 20, Nov. (1960)
- Dragoo, Don "Archaic Hunters of the Upper Ohio Valley," Carnegie Museum Science of Man, Anthropological Series No. 3 Pittsburg (1959)
- Funk, Robert E. and R. Arthur Johnson "Preliminary Report of Excavations at Tagh-Kanick Rock Shelter," The Bulletin, N. Y. S. A. A. No. 25, July (1962)
- Hough, Jack L. Geology of the Great Lakes, University of Illinois Press, Urbana 1958.
- Lewis, T. M. N. and Madeline Kneberg, "The Archaic Culture in the Middle South," American Antiquity, Vol. 25, No. 2, Salt Lake City (1959)
- Ritchie, Wm. A. "A Current Synthesis of New York Prehistory," American Antiquity, Vol. XVII, No. 2 Salt Lake City 1951.
- \_\_\_\_\_ "Ground Slates: Eskimo or Indian," Pennsylvania Archaeologist Bulletin, July-December (1951a)
- \_\_\_\_\_ "A Probable Paleo-Indian Site in Vermont," American Antiquity, Vol. XVIII No. 3 (1953)
- \_\_\_\_\_ "Traces of Early Man in the Northeast," N. Y. State Museum and Science Service Bulletin 367, Albany (1957)
- \_\_\_\_\_ "An Introduction to Hudson Valley Prehistory," N. Y. State Museum and Science Service Bulletin 367, Albany (1958)
- \_\_\_\_\_ "The Stony Brook Site," N. Y. State Museum and Science Service Bulletin 372, Albany (1959)
- \_\_\_\_\_ "A Typology and Nomenclature for New York Projectile Points," N. Y. State Museum and Science Service Bulletin 384, Albany (1961)
- Smith, Carlyle S. "The Archaeology of Coastal New York," Anthrop. Papers American Museum of Natural History, Vol. 43, Part 2 (1950)
- Stackhouse, E. J. and M. W. Carl "Discovery of the Sheep Rock Shelter," Pennsylvania Archaeologist Bulletin, July (1962)

Witthoft, John "Notes on the Archaic of the Appalachian Region," American Antiquity, Vol. 25, No. 1 (1959)

Wittry, Warren L. "The Raddatz Rockshelter Sk5, Wisconsin," The Wisconsin Archeologist, Vol. 40, No. 2, Milwaukee (1959)

NEW YORK STATE ARCHEOLOGICAL ASSOCIATION  
ANNUAL MEETING

Rochester, April 6, 1962

The Annual Meeting was called to order on April 6th at 9:30 a. m. Approximately 32 people attended. President Casler appointed William Rice and Charles Gillette as tellers to count the ballots. The following was the order of business.

1. It was voted to accept the minutes of last year's meeting as published in THE BULLETIN.
  2. The Secretary's and Treasurer's reports were read and accepted. Arthur Johnson was appointed to audit the Treasurer's books.
  3. Arthur Johnson announced that his audit of last year's Treasurer's books found everything in order.
  4. The reports of the Chapters were read as follows: Auringer Seelye (Jean Haskell); Chenango (Mercian Whitney); Frederick Houghton (Janet Kertziel); L. H. Morgan (Evelyn Forney); Long Island (N. Y. S. A. A. Secretary); Metropolitan (Mauck Brammer); Mid-Hudson (Earl DeWitt); Orange County (Selwyn Gibbs); Van Epps-Hartley (Arthur C. Glamm).
  5. The reports of the following committees were read: Nominating Committee (Arthur Johnson); Awards Committee (Louis Brennan); Publication Committee (Marian White); Constitutional Committee (William S. Cornwell).
  6. The results of the election were announced as follows: President, Earl Casler; Vice President, Charles F. Hayes, III; Secretary, Robert E. Funk; Treasurer, Margaret B. Schram.
  7. An announcement was made that Syracuse University would conduct an archeological field school in 1963 with Dr. William A. Ritchie as visiting professor.
  8. It was announced that the Executive Committee had approved the publication of an index of sites mentioned in N. Y. S. A. A. publications, and that Morgan Chapter had offered to conduct the project.
  9. A note of appreciation was given to Mr. Charles Wray, Program Chairman, the Lewis Henry Morgan Chapter, and the Rochester Museum of Arts and Sciences for their hospitality during the 1963 meeting.
  10. It was announced that the 1964 Annual Meeting would be held in Middletown, N. Y., at the invitation of the Orange County Chapter.
- The business meeting was adjourned at 11:00 a. m. --Charles F. Hayes, III. Sec.

## PROGRAM OF ANNUAL MEETING

Headquarters: Treadway Inn -- Rochester Museum of Arts and Sciences

Saturday, April 6

- 8:00 a. m. to 12:00 M. --Registration, Rochester Museum Main Lobby  
 8: a. m. --Business Meeting, Rochester Museum Small Auditorium  
 11:00 a. m. --Welcome, William S. Cornwell, President, Lewis H. Morgan Chapter  
 11:05 a. m. --Welcome, W. Stephen Thomas, Director, Rochester Museum of Arts  
 ...and Sciences  
 11:10 a. m. -11:30 a. m. --"Indian Medicinal Herbs and White Man's Medicine" Dorothy B.  
 Taylor (Auringer-Seelye Chapter)  
 11:35 a. m. -12:M --"The Lewis H. Morgan Collection" Charles F. Hayes, III, (Rochester  
 Museum-Lewis H. Morgan Chapter)  
 12:M-2:00 p. m. --Lunch at the restaurant of your choice. Inspection of the Lewis  
 H. Morgan Collection at Rochester Museum, Room A, Second Floor  
 2:00 p. m. -2:20 p. m. --"A Recently Discovered Paleo-Indian Site in New York" (Illustrated)  
 W. A. Ritchie (State Museum--Van Epps-Hartley Chapter)  
 2:25 p. m. -2:45 p. m. --"Settlement Pattern Change among Farming Villages in New York  
 ...and Ontario"--Marian E. White (Buffalo Museum--Frederick M.  
 Houghton Chapter)  
 2:50 p. m. -3:10 p. m. --"An Early 18th Century Mohawk Cemetery"--Donald Lenig (Van  
 Epps-Hartley Chapter)  
 3:15 p. m. -3:35 p. m. "Man's Use of the Flint Quarries in Western New York" Richard L.  
 McCarthy (Lewis H. Morgan Chapter)  
 3:40 p. m. -4:00 p. m. --"Neutral Archeology" Frank Ridley (NYSAA Member-at-Large)  
 4:05 p. m. -4:25 p. m. --Current Appraisal of New York Archeology", Lewis J Brennan  
 (Metropolitan Chapter)  
 4:30 p. m. -5:00 p. m. --Discussion of Brennan's Subject  
 5:30 p. m. --Cocktail Hour, Treadway Inn  
 6:30 p. m. --Banquet, Treadway Inn  
 8:00 p. m. --Early Man in the Northeast", Don W. Dragoo (Carnegie Museum,  
 Pittsburgh, Pa.)

## CITATION AND ENCOMIUM

Richard L. McCarthy

Archaeologist, prehistorian, ethnographer, genealogist, historiographer, and adopted son of the Hawk clan of the Senecas and the Beaver clan of the Tuscaroras, Richard L. McCarthy of Morgan Chapter, New York State Archaeological Association and Ondaira Archaeological Chapter, Buffalo and Erie County Historical Society, has done work over the past five years of scholarly worth and substance toward the advancement of knowledge of historic and prehistoric studies in New York.

Mr. McCarthy has performed archaeologically in the excavations of the Shelby and Kienuka sites, reported by others, on the Portage site at Lewiston and the Giess site reported by himself, and on the Divers Lake and Lewiston Mound sites not yet reported. According to Dr. Marian White in her "Dating the Niagara Frontier Iroquois Sequence" N. Y. S. A. A. Bulletin, November 1958, "Richard McCarthy has done the major share of the work on the Shelby and Kienuka sites." In historic archaeology, Mr. McCarthy participated in and reported on the fixing by excavation of the Joncaire trading post called Magazin Royale near Lewiston. Mr. McCarthy is the author, with Harrison Newman, of "The Iroquois" and of "Prehistoric People of Western New York", both in the "Adventures in Western New York History" series published by the Buffalo and Erie County Historical Society. That "The Iroquois" is probably the most sympathetic and authentic short description of the Ho-de-no-sau-nee in print, worthy of being required reading in every New York school, must be attributed to Mr. McCarthy's dual Iroquoisian kinship by adoption.

Mr. McCarthy's one venture into genealogy, appearing in Niagara Frontier, the quarterly of the Buffalo and Erie County Historical Society, though it concerns his own forbears, has wider historical implications and is a pleasantly written job of studious research.

Therefore, in recognition of archaeological work attested to have been done in a competent manner and of reports written and published in archaeology, prehistory, history, and ethnography written with due regard for accuracy and the responsibility of advancing knowledge in these fields, the Committee on Fellowships and Awards of N. Y. S. A. A. hereby accords Richard L. McCarthy the status of Fellow and the honors and privileges due this status in the Association. --The Committee on Fellowships and Awards, Louis A. Brennan, Chairman, April 6, 1963.

#### PATTEE'S CAVES, Continued

#### THE POSSIBLY RELATED SITES ELSEWHERE IN NEW ENGLAND

Andrew Rothovius

Milford, N. H.

From time to time, reports have been received of structures elsewhere in New England having similarity to those in the North Salem complex. For the past year, the present North Salem group has made it a prime endeavor to run down these reports; and some fifty-odd have been located from Maine to Connecticut. Most of these are solitary and isolated from each other and will, in the majority of cases probably turn out to be of Colonial origin--a few have already been definitely checked out as such. Some, however, appear to have unusual characteristics linking them with North Salem; and in the area of Shutesbury and the surrounding towns of Montague, Leverett, Wendell, and Pelham in a section of west-central Massachusetts that has been sparsely populated since the sizeable emigration to the Middle West around 1820-30, about fourteen structures have been found within a circle about eight miles in diameter, that seem to have some connection with each other and not easily accounted for on the supposition of Colonial origin.

The most remarkable of these are on the south side of Morse Hill, or more exactly on a southward extension of it on the Nagel farm on the Leverett-Shutesbury line. Here

three dolmens and a fourth structure of decidedly unusual shape and dimensions have been located; and the hill slope is dotted with mounds that may conceal buried dolmens. One of the three now known to exist was originally discovered by a hunter's dog falling through the earth covering of its entrance. This has side walls that continue down to a depth of at least three feet, from an above-ground height of three feet, indicating that if dug out, it would be at least equal in dimensions to the North Salem dolmens.

(To the foregoing, Rothevius has added the following in a recent communication)... Since writing those statements, we have now had some of them looked over by Frank Glynn, and the following is a summary of what he --and Frederick Pohl-- thought of them after our field trip in the Leyden-Shutesbury area of Massachusetts on May 18-19."

The beehive-like structures of which there exist four in this area -- one at Leyden, two at Shutesbury, one in Pelham -- exhibit features that in Mr. Glynn's opinion rule out construction later than ca 1700. (A large tree stump is imbedded in the side wall of the Leyden structure and lends support to this view.) Glynn and Pohl feel that because of their isolation from each other, they are not part of any settlement pattern such as that at North Salem. They therefore posit that the structures may have been erected by the earliest white settlers in the Pioneer Valley, ca 1635-75, as hideouts from Indian attack. Their location in positions relatively difficult to find, such as the central part of swamps, is consistent with this view. Should later work support this theory, it will be an important contribution to our knowledge of the 17th century colonial practices, as it had not previously been known that stone refuges were used.

It must, however, be kept in mind that much remains to be done before any final opinion can be pronounced. Further, Glynn and Pohl admit that no Colonial explanation appears to be applicable with any degree of logic, to the strange "Altar Shrine" structure on the Leverett-Shutesbury line. The walled underground springs on the Nage l farm and at Petersham are also still quite problematical.

Tom Lee is hoping to be with us this summer, and we look forward to his views both on N. Salem and the associated sites. Further research is being done in Shutesbury in an attempt to locate a rumored "very large" structure in the dense laurel jungle. If found, it may provide valuable evidence one way or the other.

#### EASTERN STATES ARCHEOLOGICAL FEDERATION REQUEST FOR PAPERS FOR THE 1963 ANNUAL MEETING

The 1963 annual meeting of the Eastern States Archeological Federation will be held on Saturday and Sunday, November 9 and 10, at Philadelphia, Pennsylvania. Papers will be accepted for this meeting in all of the fields covered by the Federation, including archeology, ethnology, anthropology, and Indian history.

Each potential contributor is requested to submit to the Program Chairman as soon as possible the information listed below:

- a. Title of paper and author
- b. Illustrated or not (35 mm. slides will be assumed unless otherwise stated.)
- c. Type of site, its context and cultural period.
- d. Any important or unusual pertinent facts which are known at this time i.e., sufficient information to enable the Program Committee to analyze the proposed paper

for its inclusion in the program.

e. Is exhibit space desired, how much?

f. Papers will be accepted with the understanding that abstracts, no longer than two double-spaced typewritten pages, suitable for publication in the EXAF Bulletin, shall be sent to the Program Chairman by OCTOBER 25, 1963.

The above data should be submitted to the Program Chairman, T. Latimer Ford, 1906 Ruxton Road, Ruxton 4, Maryland. They must reach him by SUNDAY, SEPTEMBER 1, to ensure consideration by the Program Committee.

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### PREFATORY

With this issue THE BULLETIN begins publication of "Fortifications of New York During the Revolutionary War: 1776-1782" by Michael Cohn, Metropolitan Chapter. This exhaustive and fundamental study of more than fifty military works in Manhattan, Brooklyn, the Bronx, and Staten Island now exists in privately issued mimeograph copies only. THE BULLETIN considers it a privilege and a valuable scientific service to be able to disseminate and preserve this unique and historically basic project of research.

### FORTIFICATIONS OF NEW YORK DURING THE REVOLUTIONARY WAR: 1776-1782

Michael Cohn

Metropolitan Chapter

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### INTRODUCTION

This study of the Forts of New York during the Revolutionary War is not only an aid to local history but a commentary on the tremendous effort needed to hold a static area against a mobile enemy. This is as true of the Americans trying to hold the city against mobile British sea-power as it is of the British holding it against Rebels roaming the countryside at will. It is a commentary particularly pertinent in light of recent military experiences in Malaya, Viet Nam, Algeria, etc.

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The writing was done as a history research project of the Special Baccalaureate Program of Brooklyn College. The impetus for the study and much help in archeology was given by Julius Lopez, late Director of the New York City Archeological Group. Thanks are also due to Harry Trowbridge, who directed the Ft. Independence dig, Richard J. Koke, curator, and the librarians of the New York Historical Society, the American History and Map rooms of the New York Public Library, the William C. Clements Library, Bergen County Society, Staten Island Historical Society, and the many individuals who gave freely of their time and information.

Special thanks are due to my wife, whom I wearied many a night with talking and typing, and Murray Scharfstein, who mimeographed this paper.

For errors of fact and spelling, commission and omission, I am personally responsible. --  
Michael Cohn, New York 1962.

### FT. GEORGE AND GRAND BATTERY

**Location:** These batteries covered the south end of New York Island, occupying the area of the present day Custom House. The present day Battery Park is erected on fill, and the water line was further in at the time of the Revolution.

**Construction:** Both of these fortifications date back to the Dutch occupation of New New York. After inspecting them in February 1776, General Lee decided to make the fort untenable by tearing down the north wall and throwing a traverse across Broadway 200 yards further north. The guns were removed from the Grand Battery at the same time. (1)

May 10th, 1776, General Washington gave orders to rearm the shore line (2) and in 1778 the Grand Battery was in good shape. (3) Further work was done on the platforms and embrasures of both the Fort and the Grand Battery in July, 1779. (4) The magazine of the Fort was repaired in August, 1780 (5), and a working party was sent to the lower battery in July, 1782. (6)

**History:** The value of these fortifications was given by Lee when he wrote: "It is agreed, and justly, that to fortify the city against shipping is impracticable," (7) and again by Hughes when he wrote two years later, "New York's defense toward the water is a battery of 40 or 50 guns, erected on a piece of land where the rivers join and commanding both, though not sufficiently to prevent ships passing, which the enemy might do with little injury either from the battery or from the fort at Paulus Hook." (8)

**Armament:** In 1776, four guns in traverse behind the fort. (9) In 1778, 40 or 50 guns in the Grand Battery. (10) In 1779, heavy ordinance added. (11)

**Garrison:?**

**Archeology:** None

### EAST RIVER BATTERIES

**Location:** WATERBURY BATTERY below the Jew's Burying Ground, now under the Williamsburg Bridge approaches

SHIPYARD BATTERY between Jones and Bedlam Redoubt at the water level. (12)

**Construction:** Built by the American Army in the early spring of 1776 and apparently not kept up by the British. (13)

**History:** These batteries fired on British ships passing up the East River after the Battle of Long Island, an attack upon the frigate Rose being recorded September 3, 1776. (14) No damage from the fire of those guns is indicated.

**Armament:** Two guns (Shipyard) (14)

**Garrison:** April 16, 1776, two companies behind Shipyard. (13)

**Archeology:** None

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(1) Charles Lee, Papers, Collections of the N. Y. Historical Society 1883, Vol. 4;337.

(2) The Writings of George Washington from Original Manuscript Sources, John C. Fitzpatrick (ed) Government Printing Office, Washington, D. C. 1912. Vol. 5, p. 31.

(3) Thomas Hughes, A Journal, Cambridge Univ. Press 1947. p. 55

(4) Sir Henry's Clinton General Orders incl. Brigade and Battalion Orders of the Guards, January 1-December 28, 1779

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- (5) Maj. Gen. James Pattison, Official Letters, Collections of the N.Y. Historical Society. 1875 p. 202.
  - (6) Journal of Phillip von Krafft, Lieutenant of the Regiments von Bose 1776-1784. N.Y. Historical Society 1882. p. 164.
  - (7) Lee *ibid* 4-257
  - (8) Hughes *ibid* p. 56
  - (9) Lee *Ibid* p. 4-337
  - (10) Hughes *ibid* p. 56
  - (11) Clinton's Orderly Book
  - (12)
  - (13) Orderly Book of the First New York Regiment, March 25-May 24, 1776 Ms. NYHS
  - (14) Tatum, The American Journals of Ambrose Serle, Huntington Library, San Marino, Calif. 1940. p. 91
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#### JEW'S BURYING GROUND, BEDLAM'S OR CITIZEN'S REDOUBT

**Location:** This redoubt was located on the high ground near the East River at Madison and Market Street, behind the Jewish Cemetery from which it drew its first name.

**Construction:** This post was built as the original anchor of the line protecting New York City from the north. (1) It was rebuilt by citizens of the city of New York in 1780. (2)

**History:** This fort never participated in any action.

**Armament:**

**Garrison:** 1776 (April 16), Col. Baldwin's Massachusetts Regiment. (1) 1780 (February 5), 1 Naval Captain, 1 Lieutenant, 100 seamen of the Royal Navy. (3)

**Archeology:** None

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- (1) Orderly Book kept by Nathaniel Mitchell, Capt. Lunt's Company, Col. Moses Little's Regiment (Massachusetts) Ms. NYHS
- (2) Pattison *ibid* p. 128
- (3) *Op. cit.* p. 350

#### JONES HILL

**Location:** This redoubt was located on the height above the East River at what is now Grand Street and Columbia Street.

**Construction:** This post was built by Spencer's troops sometime between April 16 and May 22, 1776. (1) After the evacuation of New York by the Americans it was strengthened by the British. On October 2, 1776, general orders called for 1,000 fraizing and pickets for this redoubt. (2) On January 23, 1780, General Pattison ordered gun platforms to be built in a hurry at the redoubt or, if necessary, temporary means used as substitutes for them. (3) On May 29, 1780, this post had been connected to the other posts by a new line along the same ground as the old American works (4). In 1782, the entire area of Corlears Hook was enclosed by orders of General Carleton (5).

History: This post never participated in any action.  
 Armament: 1780, eight 12 pounders (3)  
 Garrison: 1776 (May 22) Spencer's (1) 1780 (February, when the river was frozen over) 1 Naval Captain, 2 lieutenants, and 210 seamen (6).  
 Archeology: None

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- (1) It does not appear on the alarm posts for April 16 in the 1st N. Y. Orderly Book, but does appear on the list of posts for May 22, 1776 in the Mitchell Orderly Book.  
 (2) Orderly Book of Captain Henry Knight, Aide-de-Camp to General Howe, September 26, 1776 - June 2, 1777. Ms NYHS  
 (3) Pattison *ibid* p. 350  
 (4) Pattison *op. cit.* p. 179  
 (5) British Hq. Map 1782  
 (6) Pattison *ibid* p. 361
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#### BATTERIES ALONG THE HUDSON

Location: WHITEHALL BATTERY behind Washington's Headquarters, later called NORTH BATTERY. (1, 2)  
 OYSTER BATTERY behind Trinity Church (1) sometimes called MacDougall's.  
 JERSEY BATTERY to the left of Grenadier's Battery, now Reade Street west of Greenwich Street.

Construction: These batteries were started on orders of General Lee on February 29, 1776 (3) and were more or less completed by May 22, 1776 (1). They were repaired and improved in the summer of 1782 by the British (4).

History: All these batteries fired in turn upon the Phoenix and Rose but engaged in no other action.

Armament:

Garrison: 1776 (April) three companies of Colonel Bond's Regiment were assigned to the Jersey Battery (5)

Archeology: None

#### BAYARD or BUNKER HILL

Location: This commanding height at Center and Grand Street was an obvious spot for a fort and was occupied during the entire war.

Construction: This earthen fort was constructed by April 16, 1776 (5). Further work was done on it July 1 when 450 men were sent there as a working party. (1) The British defense line built in May, 1780 went "by way of Bunker Hill" (6) and on March 17, 1782 Captain Benson's Independent New York Company (Loyalist Militia) was at work there. (7) On May 16, 1782 all work on the lines in front of New York City was stopped on orders of General Carleton. (8)

History: This fort never participated in any action.

Armament:

Garrison: 1776 (April) Colonel Groton's Regiment. (5)  
 Archeology: None

\*Further data on this post might be found in the diary of Corporal Elisha Bradley, Col. Swift's Regiment of 1776 offered for sale by Charles Hamilton, New York. Catalog 40 #423.

- (1) Mitchell Orderly Book
- (2) Hughes *ibid* p. 105
- (3) Lee *ibid* 4-337
- (4) B. F. Stevens Facsimile of Unpublished British Hq. Map, reproduced from the original drawing in the British War Office, Malby & Sons, Engravers London 1909.
- (5) 1st New York Orderly Book
- (6) Pattison *ibid* p. 176
- (7) Papers of Captain Benson's New York Company, Ms NYH5
- (8) von Krafft *ibid* p. 161

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#### HOSPITAL REDOUBT

Location: This post was behind the main line and inland from the Hudson River at Worth Street and West Broadway.

Construction: On April 1, 1776, this work was described by John Varick: "They have founded a breastwork around the hospital... composed solely of dirt and sod. The thickness is about ten feet and about seven feet high, with a ditch twelve feet wide and seven feet deep surrounding the whole. This will afford a safe retreat from small arms." The post does not appear on any British map and so must have been demolished in the fall of 1776.

History: This post would have been useful only if General Lee's original plan to fight in the streets had been followed. When Washington ordered the shore defenses remanned on May 10, it became useless.

Armament:

Garrison: 1776 (April 16) Col. MacDougall's New York Regiment (2)

Archeology: None

#### LISPENARD'S (CIRCULAR REDOUBT, STAR REDOUBT, BREW HOUSE) AND GRENADIER BATTERY, FOUNDRY REDOUBT

Location: This western anchor of the line defending New York was a double post with a redoubt covering approach by land and another battery guarding the Hudson River. The site is at Laight and Varick Streets, the land having been built out with fill since the Revolutionary War.

Construction: Thanks for the construction of the Grenadier Battery was publicly given in the General Orders for April 29, 1776 to the New York Grenadier Company

(Militia). (3) The post was already manned ten days earlier, however. (4) The circular redoubt was constructed later as it does not appear on the alarm post list of May 22, 1776. (5)

The British had the battery rebuilt into a redoubt and changed the landward fort into a star shape before February, 1780. In 1782, a working party of 500 men were engaged in drawing a ditch and additional ramparts at the Brew House. (6)

History: It can be presumed that the Grenadier Battery was in action against the British frigates sailing up the Hudson on July 12, 1776.

Armament: 1776 two 12-pounders, two mortars (7); 1780, one 24-pounder, two 6-pounders, 13-inch mortar (Foundry Redoubt), three small mortars plus unknown guns (Star Redoubt) (8)

Garrison: 1776 (April 16) Col. Bond and four companies (9); 1781 (August) Regiment von Bunau. (10)

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(1) Letter of John Varick, April 1, 1776 published in New York City during the Revolution, Mercantile Library Association, New York 1861, p. 89

(2) 1st New York Orderly Book

(3) Orderly Book, Capt. Pierce's Company of Artillery, Colonel Knox's Regiment April 11-May 17, 1776. Ms. NYHS

(4) 1st New York Orderly Book

(5) Mitchell Orderly Book

(6) Von Krafft, *ibid*, p. 158

(7) Henry P. Johnston, *The Campaign of 1776 in New York and Brooklyn*, Long Island Historical Society, Brooklyn, N. Y. 1878

(8) Maj. Francis Duncan, *History of the Royal Regiment of Artillery*, 3rd Ed. John Murray, London 1879 p. 159

(9) 1st New York Orderly Book

(10) British General Orders, August 1, 1781 - February 20, 1782 Ms NYHS

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#### GOVERNOR'S ISLAND (NUTTON'S ISLAND)

Location: The island is opposite the Battery and Red Hook (Brooklyn) and is the largest of the islands in the Upper New York Bay, even though it was much smaller in Revolutionary days than it is today. Ships wishing to pass up the East River had either to pass between the island and Brooklyn by way of the shallow Buttermilk Channel or make a sharp turn around the western and northern side of the island. Governor's island has been used as a U. S. Army installation since the early 19th century and is now known as Ft. Jay.

Construction: 1, 000 men were at work on the Island on April 9, 1776 (1). By May 1st there was a large work there (2), but additional work parties are recorded for May 25 (3), June 19 (4), and July 1, 1776 (5).

When Serle inspected the island after its evacuation by the Americans he wrote, "The entrenchments are as extensive as the Island itself and have been constructed with immense labor and some art. There are several forts, cannon proof, with many platforms and embrasures, stockaded and entrenched at every side. To the Sound, in particular, they seem impregnable."(6).

On July 25, 1779 the British ordered new batteries to be raised and, not enough troops being available for the job, 500 citizens were also put to work (7). After October 13, the 4th Battalion New Jersey Volunteers (Skinner's Loyalists) were ordered to furnish as many men as possible as working parties (8).

History: The Island became untenable after the fall of Brooklyn and was evacuated by the Americans without opposition in the night of August 30-31, 1776 (9). The many forts never fired a shot in anger.

Armament: 1776, four 18-pounders and six 32-pounders (9). The British unspiked all but two (10).

Garrison: 1776 (April 18) Permanent guard of 100 men (11) May 1st a regiment (name unknown) (12) May 17, 1776 Capt. Craft and his company of artillery (13) July 2, 1776 Hessians (10) October 13, 1779 4th Btt. N. J. Volunteers (14).

Archeology: None

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- (1) Johnston *ibid* p. 67
  - (2) George Washington 5-81 (3) *op cit* 5-2
  - (4) Mitchell Orderly Book
  - (5) George Washington 5-208
  - (6) Edward H. Tatum, Jr., *The American Journals of Ambrose Serle*, Huntington Library San Marino, Calif. 1940 p. 96
  - (7) Pattison *ibid* p. 128
  - (8) Clinton Orderly Book
  - (9) George Washington 4-176
  - (10) Johnston *ibid* p. 96
  - (11) Serle *ibid* p. 88
  - (12) *op cit* p. 88
  - (13) George Washington 2-5
  - (14) Orderly Book of Capt. Thomas Pierce Co., Col. Knox' Regt, of Artillery, April 11 - May 17, 1776. Ms NYHS
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### HORN'S HOOK

Location: This post was to block movement from the East river into Long Island Sound and vice versa and was constructed where Gracie Mansion now stands at 90th Street and the East River. At this point the river is only 700 yards wide but has a tidal current of four to five knots.

Construction: The work was begun by Drake's Regiment of Minute Men on February 29, 1776, making this one of the first American fortifications in the New York area (1). On September 16, the parapet to the front was 11 feet thick (2). The post was strengthened by the British in July, 1781 (3) and by July 22, 1781 had a main post with palisades, a secondary work slightly further north without ditch or palisades and a blockhouse with palisades plus some low batteries(4).

History: This fort was one of the posts planned by Gen. Charles Lee and was the only one that could have stopped a flanking movement by the British through the Sound.

After the retreat from Long Island, Horn's Hook was the anchor of the defense of the East River and was promptly re-enforced by Washington (5). The British also recognized the importance of this post and planned to neutralize it. Robertson reconnoitered it on the 1st of September and raised batteries to smash Horn's Hook on the 4th (6). Two 24-pounders, six 12-pounders, and three small mortars pounded the fort (7) and "greatly destroyed it." (8) Answering fire from the fort was weak, apparently its guns could not get at the British batteries, and the only British casualties, two killed and one wounded, were caused by mortar fire(9).

Under the British the fort never engaged in any action, though it was carefully scouted for the projected attack by the French in July, 1781.

Armament: 1776, guns of unknown caliber and six mortars (9).

Garrison: Feb. 29, 1776, Drake's regiment and one company more (1) April 6, 1776, 1 company, Heath's Brigade (10). September 1776, "General Wadsworth to send two regiments from his brigade to re-enforce Colonel Sergeant at Horn's Hook." (5); 1782, 300 men (11).

Archeology: None

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- (1) Lee Papers pp. 4-337
  - (2) Harry Miller Lydenberg (ed) Archibald Robertson, Lt. Gen. Royal Engineers, his diaries and sketches in America 1762-1780, NYPL 1930. p. 99
  - (3) William B. Willcox (ed) The American Rebellion, Sir Henry Clinton's Narrative of his Campaigns 1775-1782, Yale U. Press, New Haven 1954 p. 538.
  - (4) Plan de Horn's Hook, (Karpinsky photograph 136), July 22, 1781.
  - (5) GW 5-500
  - (6) Robertson *ibid* p. 95
  - (7) Map of the Attack on Horn's Hook, Signed Charles Blaskowitz, NYPL
  - (8) Robertson *ibid*, p. 99
  - (9) Major Francis Duncan, History of the, Royal Regiment of Artillery, 3rd Ed. John Murray, London 1879 p. 309
  - (10) Orderly Book of the 1st N. Y. Regt.
  - (11) Map of Horn's Hook (Karpinsky 140)

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#### 6000 B, P, AT CROTON POINT I

A C14 date of 5863 200 yrs. B. P. (3900 B. C. ) has just been received by Brennan, Mauck Brammer, and Sigfus Olafson from the Yale University Geochronometric Laboratory on charcoal from an oyster shell midden at Croton Point. The charcoal was from the large oyster horizon called the G. O. Horizon by Brennan in "The Q Tradition and the G. O. Horizon," N. Y. S. A. A. Bulletin No. 24, where the estimate was that the horizon was 6000 yrs. old. This date now becomes the oldest C14 date on a New York State site. A fuller report will appear in the next BULLETIN.