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ABORIGINAL CULTURES AND CHRONOLOGY OF THE GENESEE COUNTRY

BY

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TYPICAL NEW YORK POTTERY

1 and 2 are typical Algonkian pottery vessels. 3 and 4 are typical Iroquoian vessels. All are in the New York State Museum Collection at Albany. No. 4 is 10½ inches high

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By Arthur C. Parker

Director of the Rochester Municipal Museum

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Introduction

Fifty years ago the problem of aboriginal American cultures was little understood. A considerable number of men, it is true, examined the mounds and earthworks of eastern America and specu-

lated upon them. Even earlier several writers had written long treatises attempting to prove that the American Indians were the descendants of the Ten Lost Tribes of Israel, while others postulated a mysterious race called the Mound Builders. This was the day of the antiquarian. His carelessly acquired specimens were called *relics* or *antiquities,* and if a qualifying expression were needed the word *Indian* was sufficient.

The excavations of E. G. Squier, A.M., and E. H. Davis, M.D., in the early 40's and the subsequent publication [1] by the Smithsonian Institution in 1847 of the record of their joint work aroused the country to some appreciation of the importance of American archeology and its vast possibilities. It was many years, however, before sufficient work had been done by trained men to make possible genuine conclusions.

For a full century at least amateur "antiquarians" have torn up Indian graves, destroyed mounds and carried away numerous evidences of the earlier occupation of the continent. Indian relics became a passion and a considerable traffic sprang up. The great firm of Tiffany and Company had its small beginnings in the sale of Indian implements and became a jewelry company only after a partner named Young added a watch repairer's table to the shop and began to sell inexpensive jewelry. Indian relics, as such native artifacts were termed, were regarded principally as curiosities. The fact that they might be important links in the study of scientific problems was entirely subordinate, or not even considered.

Thus hundreds of tumuli, cave deposits, mounds, village sites, burial places and caches were destroyed simply for the relics they contained, few or no notes or observations being made.[2]

Today most collectors are better informed, and the cultural remains of the race that formerly occupied this continent, are carefully preserved, cataloged and labeled. Science has taken the lead and asks for facts. Today the pottery pipe and engraved gorget, and even the humble arrowhead are regarded as "archeological specimens." Definite scientific problems have arisen and challenge us to solve them. Every artifact left in the soil by the vanished red men may be of importance, if the associated facts are properly

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[1] Smithsonian Contributions to Knowledge, Vol. 1, embracing Ancient Monuments of the Mississippi Valley, by E. G. Squier and E. H. Davis, Washington, 1848. (Mss. accepted for publication in 1847.)

[2] Cf. Priest, Jeremiah, "Antiquities," Albany, 1834, page 110.

recorded. The position of a bannerstone in a grave may unlock some secret; the presence of pottery, even in the form of fragments, may shed important light upon a knotty problem in archeology. A conscientious collector observes and records everything for he knows that a careless collector is a destroying vandal who merely confuses himself and others, and ruins the field of inquiry for the better informed.

New York State for a full century has been systematically hunted for "relics," but only during the past twenty-five years has any scientific method been pursued on any considerable scale. Some early observations were made by H. R. Schoolcraft, L. H. Morgan, E. G. Squier, Franklin B. Hough, Frank H. Cushing and T. Apoleon Cheney, but some of these authorities did little more than point out the fertile field that existed within our borders. Observers at that time had not yet recorded the fact that the Iroquois did not use or make bannerstones; that stamped patterns characterized Algonkian pottery, or that grooved axes were found only on non-Iroquoian sites. It remained for later students such as W. M. Beauchamp, M. R. Harrington, Alanson Skinner, Frederick Houghton, and the present writer to differentiate types of occupation, though other observers working in other localities had perhaps cleared the way for an understanding of the New York cultural areas.

New York archeology owes much to the work of Professor Frederic W. Putnam, William H. Holmes, Charles C. Abbott, Cyrus Thomas, William C. Mills and Warren K. Moorehead, and in later days to Charles C. Willoughby, Christopher Wren and Col. George E. Laidlaw, all of whom, working in the areas surrounding New York, contributed information for a more adequate understanding of the New York field. It was Dr. William M. Beauchamp, however, who did most to draw attention to certain specific problems and his pioneer work has borne abundant fruit. His series of bulletins on New York archeological subjects, published by the State Museum, did much to stimulate study. Doctor Beauchamp was one of the first to point out evidences of Eskimoan influence in New York.

The State of New York presents a peculiarly inviting field for archeological investigation. It is not the most prolific, to be sure, but among the many areas where specific problems may be studied our field has at least an important place. In Ohio the mound culture may be studied with great advantage, in Tennessee the stone

grave culture may best be examined, but in New York State the prehistory of the Iroquois may be investigated with greater advantage than in any other region we now know, not even excepting the province of Ontario.

The Iroquois were and are still the most recent aborigines to occupy this region; but they are late comers. Before them were other peoples. Our investigations show that long before the Iroquois came, the Algonkian tribes occupied at various times almost every portion of the State. There were also bands of the mound-building people, and at an earlier time, wandering tribes of people who made implements like the Eskimo.

Sources of Information

In making a systmatic examination of the field, information may be expected in certain definite areas and particular places. We must go where the evidences are in order to discover our data. In pursuing investigations and in making records, the following sources should always be kept in mind:

I. General Areas:
   1. Inhabited areas:
      a. Village sites.
      b. Camp sites.
      c. Shell heaps.
      d. Hunting grounds.
   2. Defensive works:
      a. Fort rings.
      b. Fort hills or points.
   3. Places of Industry:
      a. Workshop sites.
      b. Quarries.
      c. Garden beds.
      d. Fishing places.
   4. Places for disposing of the dead:
      a. Cemeteries or burial grounds.
      b. Ossuaries.
   5. Places of conflict:
      a. Battlefields.
   6. Routes of traffic and travel:
      a. Trails.

b. Stream beds.
c. Fording places.

7. Occasional or rare places:
   a. River gravels.
   b. Drift deposits.
   c. Swamps.
   d. River and lake bottoms.
   e. River and lake shores.
   f. Ceremonial districts and areas.

II. Particular places:

1. Sites of dwellings:
   a. Lodge sites.
   b. Cave and rock shelters.
2. Refuse deposits:
   a. Fire pits.
   b. Refuse pits.
   c. Refuse heaps.
   d. Shell heaps.
   e. Signal light ash deposits.
3. Monuments:
   a. Mounds.
   b. Cairns.
   c. Inscribed rocks.
   d. Council rocks.
4. Burials:
   a. Graves.
   b. Ossuaries.
5. Places of Industry:
   a. Kilns.
   b. Individual work shops.
   c. Fish weirs.
   d. Clay pits.
6. Places for storing or hiding things:
   a. Caches of implements finished, general.
   b. Caches of raw material, general.
   c. Individual caches.
7. Ceremonial places:
   a. Springs.
   b. Spots.
   c. Rocks.

Evidences of Various Occupations

As suitable as the New York region is, and in former times was, for human occupancy, there is little evidence that there were any human beings here in as remote times as in western Europe. So far, no one has produced satisfactory proofs of man's presence during the glacial periods. We have never known of any implements from this State that may be classified as true paleoliths, as these things are known in Europe and elsewhere. Rock shelters and caves examined up to this time, while yielding some rude flints, do not indicate any remarkable antiquity.

We do not wish to imply that man could not have been here, or to lay stress upon a mere theory of his recent appearance. What we do wish to state is that up to this time competent observers have not seen in ancient gravel deposits or in glacial till any articles that look as if indubitably made or used by human hands. It may be that some time such evidences will be found and that man in this region will be shown to have lived here during and immediately after the last glacial period. We have no sympathy with a dogmatic theory that would seek to limit in an arbitrary way the time of man's first appearance upon the earth. Man certainly was on earth fifty thousand years ago; he may have an antiquity of five hundred thousand or more than a million years, if the evidence presented by the geologists is conclusive. Our contention is that man left no traces here yet discovered by which we may know of his occupation in pre-glacial times. Where upon this continent he was, if at all, we do not know. It is apparently true that certain Asiatic tribes in the periods following the last glaciation found their way over Bering strait and dividing and subdividing became the parent stems that later developed into the great linguistic families of the two continents. The first groups we should expect would push southward along the Pacific coast with comparative rapidity. The slower movement would be from west to eastern coast.

Indeed all the rest of North America north of Mexico had a population in aboriginal times scarcely equal to that of the Pacific coast states. The densest Indian population followed the west coast southward through the desert lands of New Mexico and Arizona into Central Mexico, Yucatan and Central America.

The pressure sent more into South America. Time, climate and food and, of equal if not primary importance, the original racial character and mental impulses caused these scattered units of the

race to develop along similar physical lines. But while we think of the similarity of the branches of the red race we ought not expect them to be any more similar than the various branches of the Aryan or white race.

It is quite probable that many parts of North and South America had long been settled and that there were several millions of the red race before any large number of them crossed the great plains to begin a migration by slow stages to the Atlantic coast. The earliest comers seem to have had no habits that wrote a record into the soil. Perhaps they were nomadic and had a few settlements that endured longer than a year.

The oldest evidences of man's presence seem to be on some of the upper terraces. In western New York we have found several strange sites where the artifacts were crude and all osseous matter completely absent. The presence of carbonized material in the pits, however, proved that fire had been used. Along the headwaters of the Hudson similar old sites have been found. It would be mere guessing to say how old these places are or even that they are demonstrably the oldest.

As occupation becomes more evident, through the relics one finds, it is patent that the occupation is more recent. Thus, we may trace the historic Algonkian people by their artifacts to their prehistoric sites of occupation and these back to very rude sites that fade into others that may or may not be Algonkian.

On some of the sites that may be considered old the relics are greatly weathered. Certain sites near Oneida lake and others on the upper waters of the Hudson yield many crude flints and hatchet heads of stone that have plainly been weathered for centuries. But even in this case we can only say the relics appear to be among the oldest. The Algonkian people came to possess most of this area and in almost every portion of the State one may find Algonkian artifacts. For a considerable period wave after wave of Algonkian tribes came this way, one of the last being the Delaware. The Algonkian stock spread eastward from the Rocky mountains along the 55th parallel to the Atlantic coast, and occupied an irregular territory as far south as the 35th, even pushing wedges above and below these lines. Their east and west range, measured in longitude, spread from the 55th parallel to the 118th parallel, giving them a palmate shaped region many times greater in

extent than that occupied by any other linguistic stock in North America.

The great original stocks of this period seem to have been the Athapascan, Shoshonean, Siouan, Algonkian, and the Muskhogean, Caddoan and Iroquoian. It may be that the last three stocks were originally one. There were fifty other linguistic stocks, according to Powell,[1] north of Mexico. Time and research may condense these to a less number.

After the Algonkian people had established themselves along the Atlantic coast and the country back of it, some of the mound-building tribes of the Ohio region pushed into New York, and thereafter followed several waves of the Iroquois.

The Algonkian tribes left traces, especially along the coast, but within the State their remains, while distinguishable, are feeble in comparison with the more vigorous and culturally rich Iroquois. The mound-building people did not occupy so much of this region, but where they did leave any evidence of themselves it is startlingly plain to the archeologist. The Iroquois who came last and who lived here for the shortest period of all, have left such abundant traces, such thick refuse deposits, and so many relics of their material culture that they appear to have not only lived on the land but to have actually used it. In viewing the remains of their occupation no anthropologist would make a mistaken estimate of their mental or moral energy.

Many untrained observers have sought to identify archeological specimens found in a given locality as the products of the tribe that last lived in the region. In view of the several occupations mentioned it will be seen how mistaken this notion may be in some cases. In certain places, such as the Genesee valley, there may be as many as four types of occupation. Thus it would be highly erroneous to say that the Seneca were responsible for all the relics found. Amateurs must avoid such erroneous conclusions, though even certain advanced students have made them through lack of means to fully identify cultures.

It would be presumption to say that we have named all the peoples that have lived within the borders of our present Empire State. It is possible that some other tribe contemporaneous with the early Algonkian peoples lived here, also, and that they were similar to the "red paint," people best represented in certain Maine

[1] Powell, J. W., 7th Report, Bureau of Ethnology, (1891), pp. 1–192.

sites. It is possible that several or many stocks now unknown and perhaps impossible to know left traces behind. Certainly there are many sites that are puzzling and that suggest an occupation by people the cultural stock of which we now have no means of determining.

The Algonkian Occupation of New York

Previous to the coming of the Iroquoian tribes to this region, it seems to have been largely in the control of the Algonkian tribes. It is quite possible, however, that portions were held by tribes not of this stock, but it is nevertheless true that an examination of the field shows traces of Algonkian occupation and influence from one end of the State to the other and from north to south. We may safely assert that when the Iroquois first entered this geographical area their chief opponents, if any, were some of the Algonkian bands, though it is probable, also, that there were outpost settlements of tribes of the mound builder culture.

The Algonkian occupation of New York stretches back into comparatively remote times. There must have been wave after wave of these peoples, coming in band after band to hunt over the territory or to make settlements. Very likely the inviting regions south of Lake Erie and the Ontario-St. Lawrence basin were as much occupied by Algonkian tribes as was New England at the time of the discovery.

The Algonkian occupation appears to consist of several periods, each of which so merges into the other that we cannot tell when or where one commences and the other leaves off. Even when we do distinguish differences in the cultural artifacts we find it is not always possible to say that the difference is due to the lapse of time and the change of pattern, or to the influence of another tribe that came to supplant an older tribe. Our best clues are found along the lakes and rivers where there have been fishing camps and settlements. On the St. Lawrence, for example, there are sites along the banks that are deep with the refuse of the centuries and where one may find early Algonkian material near the bottom and in the body of the layer, and Iroquoian potsherds on top. As a general thing, few individuals have had the time or patience to make a thorough study of the Algonkian occupation except along the sea coast. For solving the riddles of migrations and occupations, however, this difficult and perhaps unproductive work must be done.

The collector who desires to get relics only and the museum that only desires to fill its display cases are both neglecting an obligation to science. Research work alone will solve the problem of the Algonkian occupation.

Periods of occupation. The earliest type of occupational evidence, that we may assume to be Algonkian, yields crude implements, large, clumsy spears, some steatite pottery,[1] mullers and metates, occasionally a polished stone implement, net sinkers, large flakes of chert or stone notched at the top for choppers, and rude celts. Only in very few sites are any implements of bone found. The Lamoka Lake site, however, yielded more than 10,000 bone artifacts, being an exception.

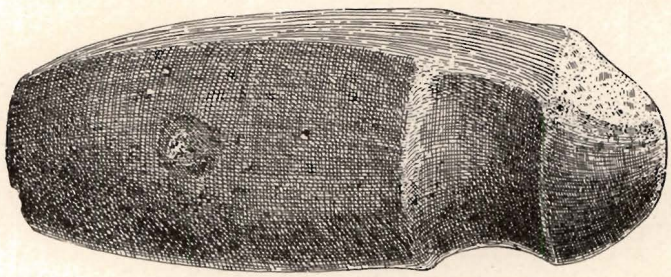


Figure 1. **TYPICAL GROOVED AXE, ALGONKIAN**

A second or intermediate period of the Algonkian occupation is characterized by grooved axes, roller pestles, a greater abundance of pottery, the surface of which is scratched or stamped with fabric or cord marks, some steatite pottery, by pits filled with crumbling and almost completely disintegrated refuse and especially by the great abundance of drills, of notched arrowheads and spears of chert and other stone. Many of the finest ceremonial stones from New York belong to this intermediate period. The sites are generally along the waterways, on the banks or upon the high level fields near creeks, lakes, and rivers. To some extent early Algonkian sites are found in such places also, but most generally on the slopes and terraces far above the present river beds.

The third Algonkian occupation is more definite in character and covers almost the entire area of the State. It is characterized by numerous flints, by clay pottery, notched choppers, grooved axes, (see fig. 1), celts, adzes, hoes, some copper implements, gorgets,

[1] Some sites, as the first layers at Lamoka Lake, are non-ceramic.

birdstones,[1] bannerstones,[1] cord-marked and pattern-stamped clay pottery, (see pl. 91), mediocre clay pipes, (see fig. 2), roller pestles, numerous net sinkers, and a considerable amount of bone implements, as awls, harpoons, needles and beads. The sites are generally on lowlands near streams and lakes, none of importance being on hilltops. The later Algonkian peoples were agricultural as is proved by the numerous instances in which charred maize and beans have been found in refuse pits. The later Algonkian tribes were more sedentary than their predecessors and their settlements presumably larger. This seems to be indicated by the presence

Figure 2. **ALGONKIAN ELBOW PIPE**

of the deposits of refuse, by refuse pits and heaps and by large areas of ground filled with carbonized matter, fire-burned stone and calcined bone.[2]

Graves of this middle periods are found, the skeletons being doubled up on one side, (flexed). There are seldom any artifacts in the graves, the skeletons alone remaining to tell the story. A typical village site of this period was found on the outlet of Owasco lake, south of Auburn, and was excavated by Mr. E. H. Gohl and the writer. The Owasco lake site is similar in culture to that excavated at Lavanna on Cayuga Lake by the Rochester Municipal Museum in 1927.

The Algonkian peoples of the tide water and Long Island present a slightly different problem, but the culture is unmistakeable. The most abundant traces are found in the refuse layers and shell heaps

[1] In certain sites only. They are not found in the later sites.

[2] Levanna and Owasco are examples.

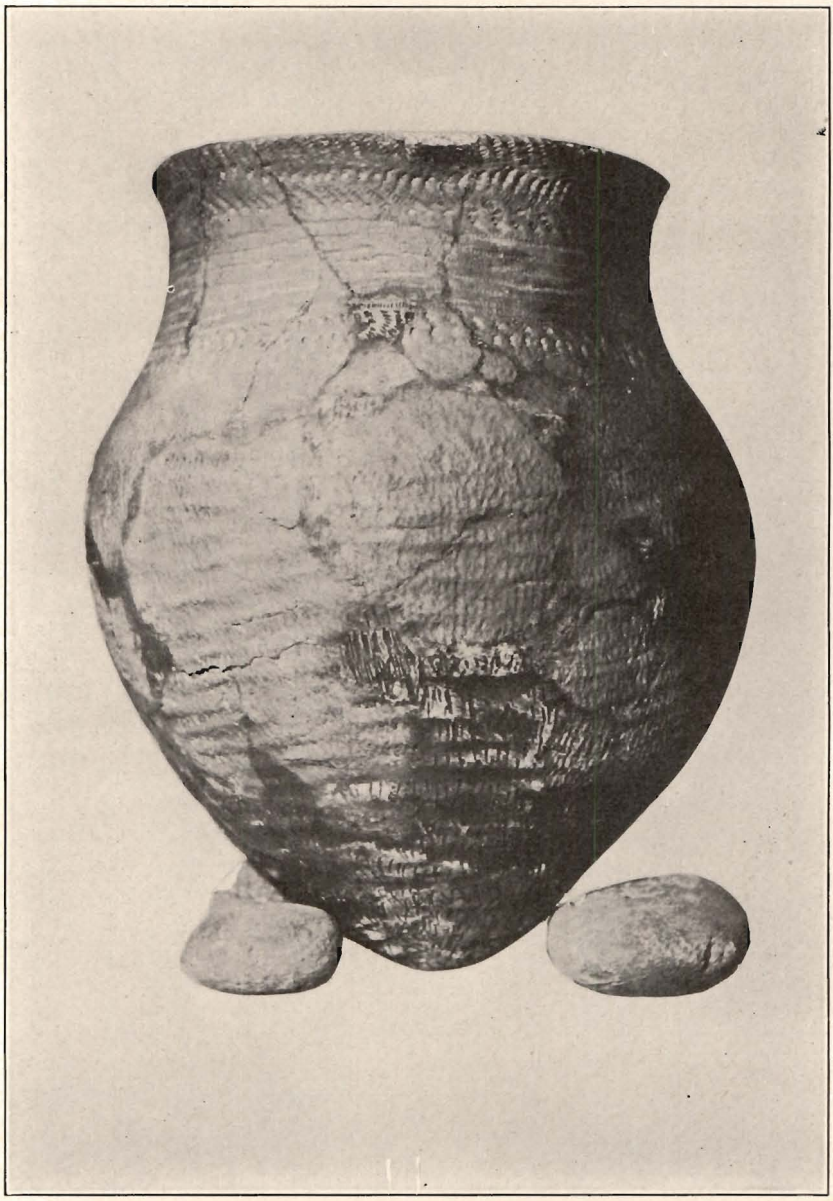
on Long Island, Staten Island, the Westchester coast and the northern end of Manhattan Island. The coastal Algonkin differed only from their inland kinsmen through the immediate influence of environment. For example, they frequently stamped their pottery with the edge of a scallop shell instead of a cord-wrapped paddle, and they used shellfish to a large extent for food.

Typical coastal Algonkian sites were found and excavated by Mr. M. Raymond Harrington, at Port Jefferson, Oyster Bay, Matinicock and Shinnecock, on Long Island; Throgg's Neck, Eastchester and Westchester on the Westchester coast; and by Mr. Alanson B. Skinner on Manhattan and Staten Islands.[1]

One is led to believe that the later Algonkin copied to a large extent the material culture of a more advanced division of the race that came from the south and the west, but which after a certain time was either absorbed or unable to maintain itself in the eastern section. That the eastern Algonkin received a great cultural impetus from the intruding strangers cannot be doubted. We have some realization of this when we note the thinning out of the polished slate objects in eastern New England, southern New York, Pennsylvania and the region north of the St. Lawrence basin, including the Erie-Ontario slopes, in Canada. On the contrary, these articles appear in the greatest abundance west of the Mohawk headwaters, westward into Ohio and down the Allegheny to the Ohio river and southward to Tennessee. The St. Lawrence basin all along the Great Lakes also yield the "problematical" slates, but there the cultural stimulus in other ways seems to be from the north.

Definite traces of what is recognizable as an Algonkian occupation occur from the Genesee valley throughout its length in New York, Wyoming and Monroe counties containing many camp sites and a considerable number of villages of this culture. Evidences are found eastward through the Finger Lakes district, southward along the valleys of the Chemung, Susquehanna and Chenango, through various portions of Chenango, Otsego and Oneida counties. In Jefferson county to the north along the St. Lawrence are also abundant traces. Southward along the Delaware river through the counties of Delaware, Ulster, Sullivan, Orange and Rockland the relics of occupation seem almost entirely Algonkian. The Hudson valley shows an Algonkian occupation as evidenced by the forms

[1] See Anthropological Papers, American Museum of Natural History, Vol. III., 1909.



ALGONKIAN POT

Typical Algonkian pottery vessel of the Third period. Note the impressed markings near the rim and the paddled surface of the body. Note that Algonkian pots of this period are ovate with the smaller end down. This specimen was restored from numerous fragments and was found crushed in a pit at Levanna, Cayuga County, N. Y. In height it is 12 inches

of pottery and other artifacts. In some places Algonkian articles are found directly beneath Iroquoian deposits, as at the mouth of Honeoye creek and along the shores of the St. Lawrence river.

Methods of identification. In any endeavor to determine the cultural significance of any artifact there must be a certain and definite means of comparison. To fix the characteristics of a culture we must have before us the results of actual excavations and collections made in and on a site. In other words, we must reason from the known to the unknown. Once we know the characteristics of an Algonkian site we may look elsewhere and say with some degree of positiveness what is Algonkian. But to know in the beginning what is Algonkian we must find a site actually known to have been occupied by some Algonkian tribe and after examination we must find what the objects are, how they look, how they are decorated; and, what is equally important, we must determine what objects are associated. Not only must we study the ash pit and refuse heap, but the house site, the village site, the camp site and the fishing grounds.

Once we know the characteristics of an identified historical site, which may have within it European artifacts, we may look for older sites in which traces of the white man are absent. Then, when the general characteristics of the Algonkian culture are known we may say with some degree of assurance that a specimen is or is not Algonkian.

An examination of the numerous Algonkian sites in New York, and indeed elsewhere, demonstrates that the Algonkian culture was not uniform. This is not strange when we remember that the great Algonkian stock embraced many tribes and influenced this geographical area from comparatively remote times. It is natural to suppose that certain tribes varied in minor particulars from others and that in the process of time tribes may have changed some of their customs. There is an abundance of proof that this process of cultural change took place among tribes observed since the advent of the European. Changes took place, it is reasonable to suppose, in the eras before the white man came.

While it is true that our knowledge of the various occupations is incomplete, enough sites have been examined by competent observers to afford some basis for comparison and identification.[1]

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[1] See, Archeological History of New York by A. C. Parker, N. Y. State Museum, 1922.

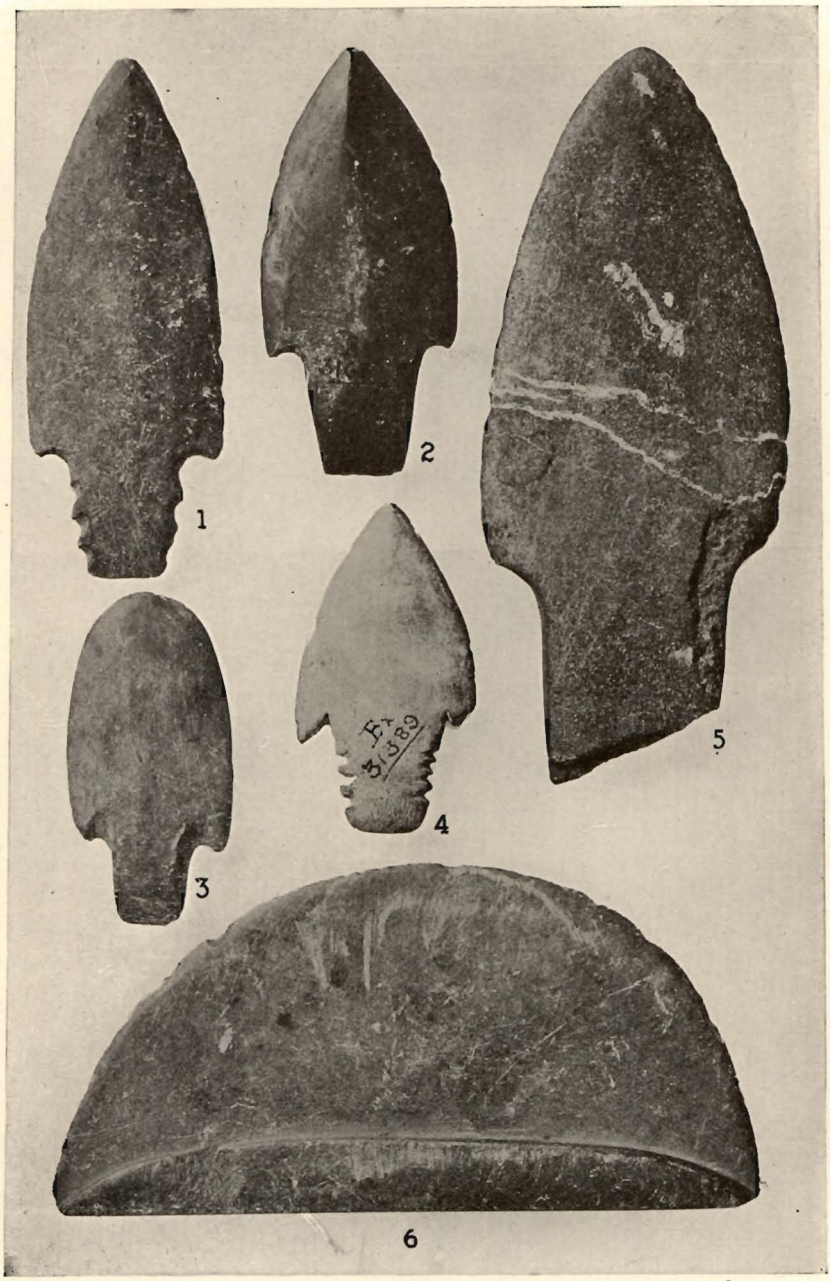
The Eskimo-Like Culture

In various localities throughout the State there are sites that seem to have been occupied at a very early period. The implements found are few and crude, with now and then the anomaly of some wonderfully fine specimen. The fire pits show little refuse and almost no bone, save fragments calcined by heat. In some of these sites fire-cracked stones are abundant. Graves are shallow and show no trace of osseous substance.

So far we have mentioned nothing especially characteristic, but when we discover highly polished semilunar knives of slate and rubbed slate double-edged knives and projectile points, (see pl. 92) we have something as a guide. Associated with these objects are found fragments of soapstone pottery. Chert arrowheads are broad, large, and have sloping shoulders. Some are almost lozenge-shaped and many have thick, wide necks as if used as lance or harpoon heads. Celts and polished stone scrapers are found on these sites as also are chert scrapers and perforators. On a few of these sites bone harpoons have been found in ashy deposits. Dr. O. C. Auringer found a beautiful walrus ivory dirk in an ash pit near Troy. Associated with it on the site were crude and much weathered flints. In some sites of this general cultural horizon will be found gouges, hemispheres of hematite, figurines, ornaments of unusual shapes, and many other unfamiliar artifacts.

It is evident that sites of this character are not Iroquoian, that they are not of the later clay pot-using Algonkian tribes, and that there is little distinctive in them resembling the mound-building people, except possibly for an occasional bird stone. Further study leads to the conclusion that sites of this character were once occupied by a people influenced by the Eskimo, if not actually by the Eskimo themselves. Our investigation points out that the influence came from the north, possibly the northeast.

It would be difficult to indicate any special center in this State from which this culture radiated. The areas showing traces of this Eskimoan influence are: (1) the St. Lawrence basin to Clayton; (2) the east and south shore of Lake Ontario from Clayton to Irondequoit Bay; (3) the Genesee valley; (4) the Finger Lakes region, including the entire drainage basin; (5) the Champlain valley; (6) the Hudson valley to Albany. Scattered relics are found in Western New York and in the valleys of the Susquehanna and Delaware with their tributaries. The culture thins out as it ranges



ESKIMOAN SLATE KNIVES

With the exception of 5 and 6 all these specimens were found along the Seneca River. Note the serrated necks of 1 and 4. 5 is from Glens Falls and 6 from Hudson. Scale: x $\frac{1}{2}$

south, but it may be expected to appear in Vermont on the east and even in Massachusetts. Not much may be expected in either Pennsylvania or Ohio.

Many of these so-called Eskimoan sites appear to be of great antiquity, while others seem closely to approach the period of the middle Algonkian tribes. Indeed certain Algonkian sites that date to the opening of the colonial period seem in some ways to have been influenced by this northern culture. It is quite likely, therefore, that the period of influence [1] was a lengthy one. We may even be permitted to ask several questions concerning the people who left these evidences, these questions to constitute the problem set forth for solution by students of archeology. First, we may ask, were the people characterized by this culture true Eskimo? Second, if they were not of Eskimo stock, who were they? Were they Boethuck or Algonkin? Third, did not some undetermined people copy certain features of Eskimoan culture? Fourth, were these people exterminated, driven back to the north, or were they absorbed by later comers who perpetuated some of their arts?

It is possible that some time a painstaking student may discover and open up a site that will answer some if not all of these inquiries. Until then we may only point out the differences that we observe between these sites and others, and cautiously state that culturally they resemble those of the Eskimo. As for chronology these people seem to intrude the early second Algonkian occupation.

The Mound-Builder Occupation

There was a time when western New York was regarded as peculiarly the domain of a mysterious Preindian race known as the "mound builders."

Observers, astonished by the existence of earthworks and other prehistoric tumuli, have written elaborate descriptions and devoted considerable space to more or less melancholy speculation. The term "mould builder" became quite as romantically wonderful in the new world as that of Druid did in the old. Time and research have changed this view and it is now known that "mound builders" were Indians. The term is now used only to designate a particular culture.

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[1] Holmes thinks that " . . . Eskimo influence may have, in cases, extended as far south as the Navajo country." An. Rep. Smithsonian Instn., 1919, p. 430.

Evidence of the mound culture, so-called, is based not only upon the presence of mounds of earth, but upon the presence of cultural artifacts that are similar and frequently identical with objects known as "mound builder" implements in the Ohio mound area.

Most of the mound remains in New York are found in the western part of the state, being most numerous in Chautauqua county and thinning out in the Finger Lakes area. True mounds are found about Chautauqua lake and the adjacent territory. Most have been destroyed, but one important mound still stands upon the nose of a terrace near Poland, not far from Falconer. Excavators have approached it from the top and hollowed it by a perpendicular tunnel, so that when we last viewed it it looked like a miniature volcano. It is mentioned by T. Apoleon Cheney, in one of the early State Museum reports. Further east near Napoli, upon a hill top is the ruins of a mound which had been walled up inside with a slab chamber. This was examined by Dr. Frederick Larkin,[1] who reported that it had never been adequately explored. The present writer visited this mound in 1905, guided by Dr. Larkin, then a man over 90 years of age. Local informants reported that strangers had torn it down, broken into the stoned-up chamber and discovered skeletons and a cache of flint spears.

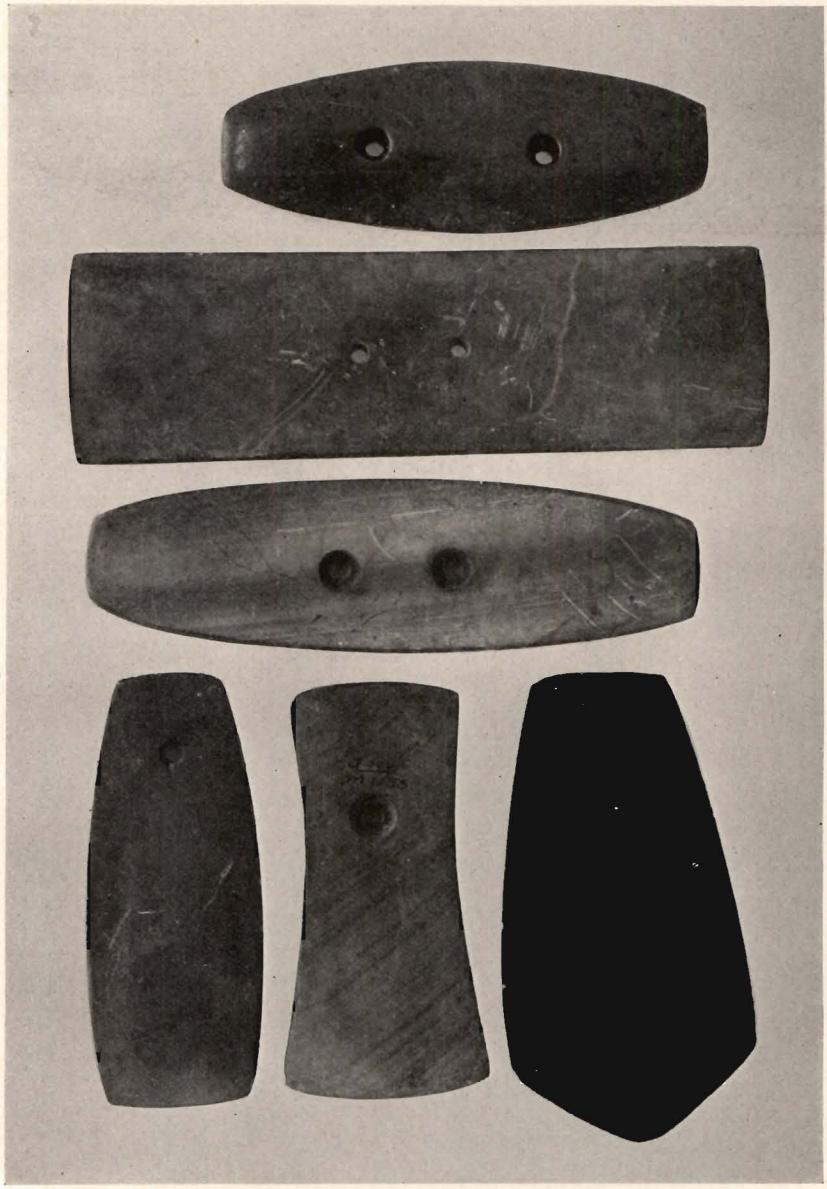
Along the Cattaraugus creek, in the confines of the Cattaraugus Indian reservation, at least ten mounds have been reported. Some were examined by Dr. A. L. Benedict for the Pan-American Exposition. The valley of the Allegany, also has revealed mounds, some of them, it was thought by T. King Jemison, an Indian excavator, resembling animal effigies.

Nearer the Genesee country, and indeed almost upon the banks of the river, is a series of three mounds upon the John C. White farm on Sqawkie hill. In one of these mounds stoned-up graves were found containing skeletons buried in an extended position. With one were pearl beads, a copper celt, a platform pipe, a double-cymbal ear ornament and some broad spears of fine workmanship.

An examination of the region about the mounds of New York indicate that the following artifacts are associated with the culture:

Platform pipes, celts, gorgets, (see pl. 93), birdstones, slate tubes, copper implements and ornaments, mica ornaments, shell beads and gorgets, heavy antler spears and harpoons, hematite articles, discoidal stones, some of them bi-concave, large spear heads and java-

[1] Ancient Man in America, p. 15. Miles Davis, printer, Randolph, 1880.



TYPICAL GORGETS

The first three are typical two-holed tablet gorgets found throughout the Genesee Country. The three arranged perpendicularly at the bottom of the plate are "one-holed" gorgets and are often called pendants. Gorgets of this type have the hole drilled at about one third the length and the holes are much larger than two or multiple-holed gorgets. Scale: x $\frac{1}{2}$

lin points and notched arrowpoints of excellent workmanship. Much of the flinty material undoubtedly came from Flint Ridge, Ohio, and much of the banded slate is identical with that from the Ohio river. They made cord marked pottery.

An examination of the area contiguous to the mounds reveals that the people were agricultural, raising corn, beans, squashes, and tobacco; that they were village-dwelling and probably sedentary.

New York mounds are from 30 to 120 feet in diameter and seldom more than eight feet high, the vast majority being from three to five feet above the ground.

The mound-building people seem to have disappeared from New York at or before the time of the coming of the Iroquois into their recognized area of occupation. We cannot be entirely sure, however, that all were driven out or exterminated. A survey of the earliest Iroquoian sites, especially in western New York, leads us to believe that the earliest Iroquoian immigrants were measurably influenced by the mound-building culture. This is so appreciable that one is led to consider three propositions as within the bounds of possibility: first, that the Iroquois were originally a part of the mound-building peoples who had separated themselves from the main cultural body; second, that the Iroquois in entering this region absorbed large numbers of the mound Indians and adopted certain of their culture traits and rejected others; third, that the early Iroquois were merely influenced at their early entrance by the mound culture.

The earlier Iroquois sites frequently yield, especially in the graves, objects similar to those found in the mounds, but not gorgets, banner stones or related forms. To be explicit, the points of similarity between certain Iroquois forms and mound area forms, as between those of Ripley, N. Y.,[1] and Madisonville, Ohio, are certain pipes and certain pottery vessels. A prehistoric Iroquois site at Richmond Mills, N. Y., known as "The Old Indian Fort," has yielded metapodal scrapers, similar in every way to those found in Ohio mound sites. From these facts and from an examination of the entire field of the earlier Iroquoian occupation in New York and Ontario, we are led to believe that the Huron-Iroquois were the successors of the mound-building people in western New York and Ontario. Our belief is confirmed by the abundance of polished

[1] Excavations in an Erie Indian Village, Bulletin 117, N. Y. State Museum, 1907; see plate 30 and pl. 22, fig. 4.

slates in Ontario in close proximity to the later Huron-Neutral sites. This fact has confused some archeologists, and led to the statement that the polished slates are Huron or Neutral artifacts, but the graves of the two peoples tell different stories.

The Iroquois once established culturally, did not copy mound artifacts. Indeed, they seem to have deliberately avoided the use of the distinguishing badges of their vanquished foes. Just as the conquerors of the first mound people of Ohio beat up the mica ornaments and hammered into shapeless masses the copper tools and gorgets of their despised victims, so did the Iroquois taboo or avoid with deliberateness, the birdstone, the gorget and similar artifacts of polished slate.

Thus we may account for the difference between the pottery, decorative art, implements, and earthworks of the Iroquois and their predecessors. This difference likewise makes it possible for us to define the polished slate area and at the same time to fix the limits of the Iroquoian.

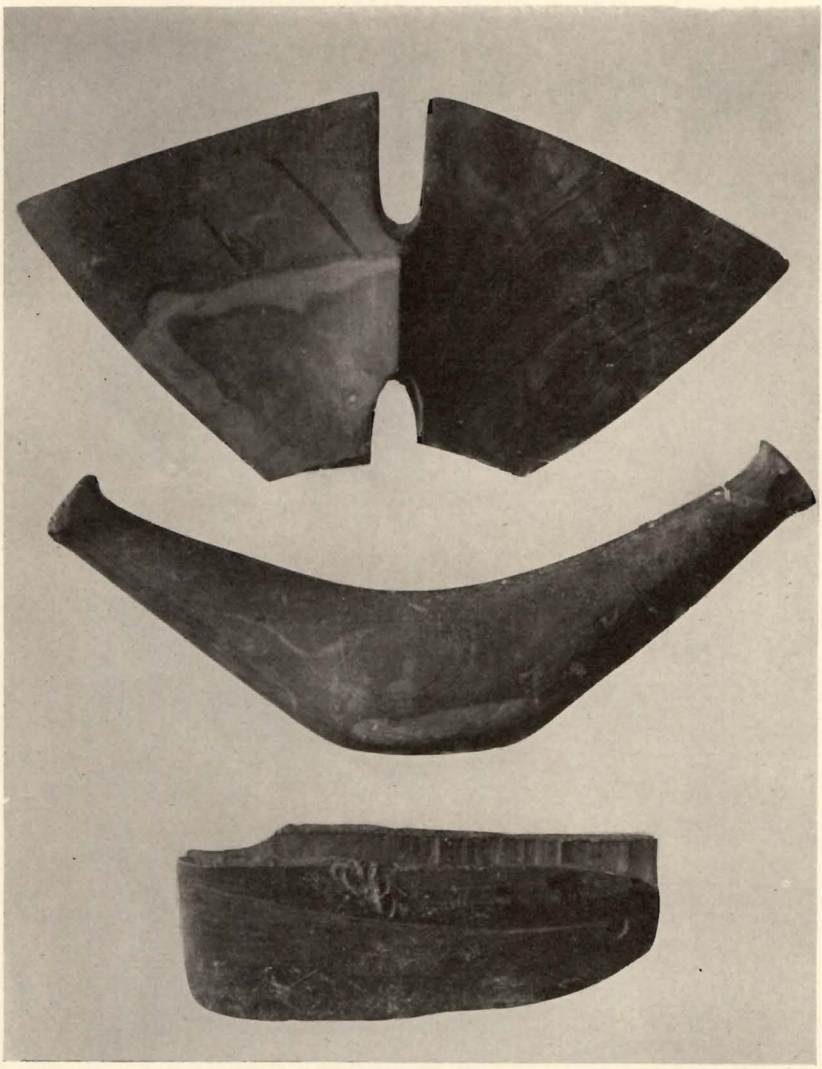
One final observation remains to be made about the mound builders as a people. We are induced to believe that the period during which they occupied this region was a longer one than generally estimated. It appears as characteristic of a certain cultural development and then sharply and totally disappears.

The Iroquois Occupation [1]

The origin of Iroquoian material culture is a subject of pertinent interest to every student of aboriginal American archeology. This particular racial stock, characterized by so many striking features, has long held the attention of historians and archeologists, but hitherto no one has attempted an analytical study of Iroquoian archeology or sought to correlate its salient facts. Much remains to be discovered, it is true, but we believe that we may now safely attempt to define the material culture of the Iroquois, so far as we may know it through archeology, and to make some intelligent inquiry into the origin of the culture as well as of the stock itself. By making this start, however faulty it may be, we hope to suggest lines of inquiry that may lead others to the discovery of facts that will point out a full solution.

Most writers have observed that there are a few places where Iroquoian artifacts are found unmixed with evidence of contact

[1] Cf. the author's article in The American Anthropologist, V. 18, No. 4, Oct.–Dec. 1916.



BANNER STONES

The upper and lower banner stones show breakage. The first is a fine example of a winged or butterfly stone, the lower tips of the wings being broken. The middle object is a crecentric or horned banner stone with knobbed ends. At the bottom is a palmate banner stone broken at the centrum and showing the drilling

with the European. The few early sites, of precolonial occupation, therefore are most instructive to the investigator, but, as a matter of fact, the purely aboriginal material found in such sites differs but slightly from those of later date, except those of a very recent period. The archeology of the Ouendat or Huron is apparently quite similar to that of the confederate Iroquois.

In pursuing our inquiry it is soon discovered that there are definite centers in which material known to be, or termed, Iroquoian may be found. In scattered spots edging these centers are isolated Iroquoian specimens, as on Manhattan Island. But the fact remains that Iroquoian artifacts are found in numbers only within certain definite centralized localities, and that these objects are not seemingly more than 500 or 600 years old. Many sites show an age of less than 250 years. At most, let us say tentatively, that within the well-recognized areas, objects recognized as Iroquoian seem only to indicate a period of cultural fixedness of less than 700 years.

The centers of prehistoric Iroquoian occupation,[1] recognized as such by the objects known to archeologists as Iroquoian, are: (1) the St. Lawrence basin with Montreal as a center, (2) the region between Georgian Bay and Ontario with Lake Simcoe as a center, (3) the Niagara peninsula in Ontario following the Grand river, (4) the Genesee river-Finger Lakes region, (5) Chautauqua county, stretching across the Pennsylvania neck into Ohio, (6) the highlands east of Lake Ontario in Jefferson county, (7) Oneida, Madison and Onondaga counties, (8) the Susquehanna about Elmira, (9) the Mohawk valley and highlands to the north, and (10) Niagara, Erie, Chautauqua and Genesee counties. Circles of various circumference may be drawn from these centers, and intercept smaller centers. This plan of approximating the areas is only a scheme to fix the localities in our minds, no attempt being made to make them independent localities with definite boundaries. The contour of the land, streams, lakes, lines of travel and danger from enemies largely determined the early limitations.

We wish now to inquire which of these centers are the oldest and if there is any possible means of determining the causes that made Iroquoian material culture differ from the surrounding Algonkian. We wish to inquire, as others have done before us, whence the Iroquois stock came into these centers and what clue may be found showing a migration from earlier centers. We wish to inquire just

[1] But compare Skinner, Iroquois Notes, Mus. Amer. Indian, 1918.

how definitely valuable Iroquoian objects, as they are now recognized, are in determining a migration from other regions.

Perhaps, then, we ought first to inquire just how permanent any form of material culture is and whether there have been any revolutions, not to say modification, in the material culture of a stock. We ought to consider that there are Algonkian tribes, for example, that are Siouan in culture and Siouan tribes that are Algonkian, as the Blackfeet and Winnebago respectively.

This leads us to inquire whether beginning about 600 or 700 years ago, Iroquois art and artifacts might not have been different? Or, if there then were no Iroquois in this region, might not they have had differently decorated pottery, for example, when they came than that later developed and now known as Iroquoian? This is a question archeology may some day answer. Our present knowledge gives us only the Iroquois potsherd and does not tell us why it is as it is.

There are certain Iroquoian traditions that seem to have good foundation, relating that at a certain period all the Iroquois were one people, living together and speaking the same tongue. Indeed so positive were the Iroquois of this that they could point out a certain woman and say that she represented the lineal descendent of the first Iroquoian family.[1] Yet the confederate Iroquois knew that she did not belong in the five tribes. She was a Neuter woman. "When the bands divided," the tradition runs, "it was found that the family of Djigonsase (Fat Face or Wild Cat) fell to the Neuter Nation." She was called Ye-gowane, The Great Woman, and she was "the mother of the nations." In the Dekanawida-Hiawatha tradition, a woman with this title is represented as being constantly consulted by both Hiawatha and Dekanawida. The latter was a Wyandot (Ouendat) from the Bay of Quinte, at the head of Lake Ontario. This points to an early recognition of blood relationship and a recollection of the time when the Erie, Neuter, Huron, Seneca and Mohawk-Onondaga were of one common tribe, a fact that archeology and philology, of course, definitely prove.

In this original tribe any culture revolution would definitely influence the various subdivisions and be carried by each as it separated eventually from the parent body. Constant intercourse would serve to preserve the culture until it became fixed. Now, assuming for the sake of argument that there was an "original tribe" and

[1] Cf. Parker, Buffalo, Hist. Soc., Vol. XXIII., (1919), p. 43 ff.

that a revolution did take place in the decorative art of the Huron-Iroquois, whence did that tribe come and when did its arts change? Traditions, again, point to a migration from the "southwest." Ethnologists are familiar with the Delaware Walum Olum, but few are familiar with Iroquois migration myths for the reason that they are few and those brief and difficult to recognize as such.[1] So many of the Iroquois (confederated) myths point to the southwest country, however, that we must pause to consider just why they have been handed down. We must ask why the "tree of the long sword-like leaves" is mentioned so often in the Dekanawida epic, and why so learned an Iroquois as Dr. Peter Wilson called it a "palm tree." We must consider why so many Iroquois expeditions were directed against enemies down the Ohio and on the Mississippi. We must consider, too, a certain alleged grammatical resemblance between the Caddoan languages and the Iroquoian. Perhaps all these considerations will be termed fanciful and lacking serious value, but even if this is admitted they do have the certain virtue of stimulating inquiry.

The older theory that the Iroquois originated or had their early home along the St. Lawrence, about Montreal, is not entirely without serious flaws. It is now believed, from archeological evidence, that certain Iroquoian tribes never came from the St. Lawrence region; for example, the Seneca. The Seneca and Erie divisions seem to have been as closely allied in western New York as the Onondaga and Mohawk were in northern and eastern New York. The Mohawk (or Laurentian Iroquois) never agreed with the Senecan division and there indeed seems to have been a long period of separation that made these two dialects more unlike than all the others of the five. It would seem that the early band of Iroquois had divided at the Detroit or the Niagara rivers, one passing over and coursing the northern shores and the other continuing on the southern shores of Erie and Ontario; and that the northern branch became the Huron and Mohawk-Onondaga; that those who coursed south of these lakes became the Seneca-Erie, the Conestoga (Andaste) and the Susquehannock. It also appears that the Cherokee and Tuscarora separated earlier than the Seneca and Huron-Mohawk divisions and perhaps absorbed other non-Iroquoian bands, still further modifying their vocabularies.

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[1] We place little credence in the Cusick account as embraced in his "Sketches of the Ancient History of the Six Nations."

In the analysis that follows we shall briefly consider the material culture of the Iroquois. In the topical discussion we have repeated certain facts mentioned elsewhere, not for the sake of emphasis only but to obtain another view of the same facts, when differently correlated.

Outline of the Material Culture of the Iroquois

The following artifacts are associated with the Iroquoian culture in the Genesee Country and other portions of New York:

Arrowheads. Iroquoian arrowpoints are thin isoceles triangles about one inch in length and a half inch broad. They are thinner and more skilfully made than those of the Algonkian people, excepting perhaps the Third Period, or later inland Algonkian tribes. Only a few notched points are found on Iroquoian sites, and most of these in graves.

Polished stone instruments. The Iroquois had few stone tools that can be classified as polished implements. Of these the celt or ungrooved axe predominates. Included with these are chisels and scrapers. Polished stone pipes are described elsewhere.

Stone tools. Iroquoian stone tools include hammerstones, mullers, notched-sinkers, sharpeners and rubbing stones.

Pottery. The pottery of these people in its characteristic form is easily recognized. It is usually well tempered and smooth surfaced. In the Mohawk-Onondaga area it is usually smooth. The typical pot is globular with a constricted neck and overhanging collar. This is most frequently decorated with incised lines, often in triangular plats of lines, the direction of the lines being reversed in each adjacent plat. The earlier pottery is frequently cord marked or has pseudo-fabric marking, similar to the Algonkian. In the Seneca-Erie area of western New York the vessels are seldom as artistically formed as with the Mohawk. The later pottery in the Genesee Country area is often globular, with a slightly flaring rim which is notched or serrated.

Bone, antler and shell. Numerous implements of bone and antler are found on Iroquoian sites. The most common are awls. Fish hooks are rather rare and three, four and five toothed combs occasionally found. Shell articles become more common on historic sites.

Fishhooks were of the simple hook type without a barb and resemble in every way the fishhooks found in the Ohio village sites,

as at Madisonville. Occasionally bone whistles are found made from the long leg bone of some bird or the wing bone of a wild turkey.

Earthworks. No adequate idea of the prehistoric Iroquois can be had without some description or mention of their earthworks. Scattered through the western and northern portion of the State of New York are more than 100 earth embankments, ditches and circular inclosures. Most of these were probably not erected in any sense as earthworks but simply as the bases for a stockaded wall. Tree trunks from 15 to 20 feet high were trimmed off and placed from 6 inches to a foot in a shallow ditch in the top of the wall and the earth was packed in about them. The tops were further secured by being tied together with bark topes and withes. There are good historic descriptions of the palisaded inclosures. The area within them ranges from one-eighth of an acre to more than 7 or 8 or even 16, and it is supposed that they contained fortified villages or were places of refuge against both human and beast enemies. They do not differ in any way from the stockaded inclosures of the province of Ontario, in the Huron-Iroquois area. In some instances they do not materially differ from the eatrh inclosures found throughout Ohio. It may be said, however, that none of them are so extensive in size as such works as Fort Ancient, nor are the embankments more than 3 or 4 feet high, except in rare instances.

There are three general forms of the stockaded inclosure, the first being the hilltop stronghold which was naturally fortified on all sides and the narrow neck that connected the out-jutting hill with the general terrace of which it formed a part shut off with a palisaded wall. Deep ravines on either side brought natural protection from the sudden onslaught of enemies and the places were rendered further secure by having the neck protected by a stockaded wall and perhaps an outer ditch. The ditch served two purposes. It afforded the material out of which the wall was erected and it made it more difficult for the enemy to climb the stockade or to set fire to its base. Typical hilltop strongholds are those at Ellington, Chautauqua county, the Reed fort near Richmond Mills, Ontario county, the fort near Portage in Wyoming county, and the prehistoric Mohawk site at Garoga.

A second form of protected inclosure is irregular in form and follows somewhat the natural line of the ground. It may or may

not be upon a hilltop. Examples of this form are found on Indian hill near Ellington, the stockade near Livonia, Livingston county, known as the Tram site, and near Macomb, St. Lawrence county, on the farm of William Houghton, near Birch creek, and Fort Hill, Auburn.

A third form is in enclosure more or less circular in form with a low wall and shallow outer ditch. Examples of these are such inclosures, as are found at Oakfield, Genesee county;[1] at Elbridge, Onondaga county, where there is a circular inclosure covering about three acres of ground; or the circular fort on the Lawrence farm in the Clear creek valley, near Ellington.

Usually within these inclosures pits are found in which refuse had been deposited or corn stored. The soil shows more or less trace of occupation and occasionally graves are found in one portion. Besides the choice of the spot as a natural defense there were other considerations, such as proximity to good agricultural land which, for primitive people with inadequate tools, must be a light sandy loam; a plentiful supply of water, nearness to the proper kind of timber and a location near a trail or stream navigable for canoes. It is not easy to determine, however, why some localities were chosen, for they are overlooked by hills from which the enemy could assail the fortification, or are situated in swamp lands. There were probably many considerations that attracted the Indians to these spots that have been obliterated with the destruction of the forests.

The earlier sites of this character in the Iroquois district in New York were upon the hilly lands south of the Great Lakes. It does not appear that the Iroquois came down from their hilltop strongholds except in few remote localities until about the beginning of the historic period when they began to build their towns on the lowlands nearer the shores of Lakes Erie and Ontario. This observation is especially true in western and central New York, but does not fully apply to the Iroquoian area in Jefferson county. It is quite likely that the Iroquois did not drive out all their enemies or take full possession of this territory until a short period before the opening of the colonial epoch. An example of village sites or earthworks upon or near the lake shores is that found at Ripley,

[1] These inclose about 10 acres of land and were described by Squier, figure 8, in his plate.

Chautauqua county. Most villages, however, were from 2 to 20 miles back from the shores of Lakes Erie or Ontario.

Mortuary customs. Many human remains are found buried beneath the ground, indicating that the body was intact when interred. Traditions and historical evidence point out also the custom of placing the body wrapped in blankets or skins in the branches of large trees, and there are preserved in the Seneca tongue the various terms employed to describe the details of this type of burial. Burial houses were also erected in which the bodies of the dead were placed until decay had reduced them to bones. For the disposal of these bones research shows that they were gathered up and buried in bundles in separate graves. Sometimes several skeletons are found in bundles in a single grave, with or without accompanying relics, as pots, flints, pipes, etc.

The Iroquois, especially the Neuter nation, the Huron and perhaps the Erie, also had ossuaries in which from ten to fifty or one hundred remains were placed. Few relics are ever found in ossuaries of the earlier period. In the individual burial, where the body was placed intact in the grave, the position of the remains is almost invariably on one side with the knees drawn toward the face and the hands placed near the face, this fixed position being that assumed by a sleeping person, drawn up to keep warm.

In the earlier graves there are few material objects, but as the time ranged into the colonial period more durable relics are found, showing the gradual growth of prosperity, and a greater abundance of material property. The burial objects that have survived the elements, are clay pots, clay and stone pipes, flint objects, as knives, triangular points, celts, bone objects, shell objects, etc. These are usually found near the chest, hands, or head. Among the hundreds of Iroquois graves and skeletons found by the writer, not one has been found "sitting up," and among the thousands or more of all cultures discovered none was sitting up, nor did the bones "crumble upon eposure to the air." The Iroquois had no definite orientation for the grave, no special side; the only general rule being the flexed position reclining on one side.

The predecessors of the Iroquois had also this rule though the makers of the stone graves sometimes placed their dead lying straight and on the back.

Miscellaneous observations. The Iroquois did not use vessels of steatite, but their carved wooden bowls of the longer type were

fashioned like them in the sense of having handles or lugs at each end.

Iroquois textiles have never received a careful study, for they are little known, but the people wove nets, bags, belts, and even shoes. Their corn-husk footwear differ from the sandals or moccasins found in the caves of Missouri only in the fact that they are complete moccasins. Small fragments of cloth and woolen bags prove that they early understood weaving and basketry.

The Iroquois carved wood and indeed the confederate Iroquois law required that the national feast bowl should represent a beaver. The idea of making receptacles resembling animals with their backs or heads hollowed out was common. Their wooden spoons had bowls shaped like clam shells and at the top of the handle was carved a bird or animal strikingly like those they modeled on pipes.

The Iroquois were an agricultural people of village dwellers. Early Iroquois villages were on hills overlooking valleys and were stockaded. The early villages had earth rings about them and sometimes an outer ditch. Upon the ring or wall of earth the palisades were erected. Later villages were in the valleys besides lakes and streams and were not stockaded. The Iroquois towns of the sixteeth and seventeenth centuries were increasingly without such a wall. The Iroquois did not build mounds, of the character known throughout Ohio or Wisconsin, at least when they used the pottery and pipes we have described.

Iroquois houses were of bark and there were large communal dwellings. Many of them held from five to twelve families or more. They had either a rounded or pitched roof with openings at the top, as vents for each fire beneath. The Iroquois did not ordinarily employ the conical skin tepee.

The permanency of their village life is indicated in a measure by their vast fields of corn and other vegetables. Agriculture exercised an immense influence over their national life and it was pursued with method and on a large scale. There are accounts of expeditions sent out to procure new seeds and vegetable foods. Corn pits are often found in village sites.

Iroquois consanguinity was matriarchal. There were various clans, having animal symbols and names. The women nominated the civil sachems and could veto the acts of the tribal councel.

The Iroquois cosmogony relates that a pregnant woman fell from the heaven world. She fell upon the back of a great turtle and

gave birth to a female child. This child grew quickly to maturity and gave birth to two sons, good minded and evil minded, or more properly Light one and Dark one. The Light or shiny one molded man after seeing his own reflection in the water. He found his father dwelling on the top of a mountain that rose from the sea "to the east," and begged certain gifts from him, which were given, tied up in bags. Reaching his homeland again, the Light one opened them and found animals and birds of all kinds, trees and plants. The mother of the two boys died in giving them birth, killed by Dark one or the Warty (Flinty), who insisted in emerging through her armpit. The grandmother nursed the boys and bade them watch their mother's grave. The food plants and tobacco sprang from her grave. The sun and moon in other versions were made from her face, eyes, and limbs.

Nearly all Iroquois legends relate to incidents of the southwest. Many expeditions are told about, that relate to the country down the Ohio river. Few stories of the north are related. The north was only the land of great terrors and savage giants.

Comparison of the Iroquoian Culture

As has been seen in the foregoing description outlining the material culture of the Iroquois, there are certain definite things which characterize their handiwork. The Algonkian tribes, in some instances, erected earthworks or stockaded inclosures, but apparently far less in extent than the Iroquois. In this respect, the Iroquois more greatly resemble the Indians of Ohio and the southern states. With the exception of the size and height of the walls, their earthen wall inclosures do not greatly depart from certain Ohio forms. The Iroquois, however, in no sense erected mounds of the character found in Ohio, neither does it appear that they were numerous enough to require, or to be able to erect, such extensive earthworks. A greater number of these inclosures are found in New York, west of the Finger Lakes district and on the hilly regions of Chautauqua, Cattaraugus, Erie, Wyoming, Genesee, Livingston, and Ontario counties. A few are found eastward, as in Jefferson county, but a great majority are in the localities we have mentioned.

The Iroquois were an agricultural people like those of the south, as of Virginia and Georgia or in the mound district in Ohio and the Ohio valley. Corn cobs and other vegetables are frequently found in ash pits and refuse heaps in Iroquois village sites and the

use of tobacco may be deduced from the prevalence of numerous smoking pipes.

Unlike the Indians of Ohio, who built the mounds and fortifications, or the southern Indians, as those of Georgia and Alabama, or the Algonkins east and north of them, the Iroquois did not use implements or ornaments of copper or mica, nor did they use ornaments of polished slate as gorgets, stone tubes, bird stones, boat stones, and banner stones. They did not use the bell-pestle or cylindrical pestle nor as a rule did they ornament their pottery with fabric marks, notwithstanding the fact that they wove fabrics similar to the impressions found on baked pottery in the Algonkian area. They did not use the grooved axe, common among all the peoples about them, nor did they have the monitor pipe commonly found in Ohio, Kentucky, the southern states, and throughout New England. Only in rare instances did they use flints having barbs and stemmed necks. The absence of these forms of implements is significant and is the result of something more than mere accident. The Iroquois had every opportunity for knowing of such objects, and they were fully capable of making them had they so desired. It appears from these facts that the Iroquois deliberately chose not to use these things, and tabooed them from being employed in any way. Apparently there was a direct attempt to banish such articles beyond the pale of their culture. On the other hand, the Iroquois did use stone tomahawks or celts and apparently mounted them in the same manner as contiguous nations. They did use the ball-headed wooden war club such as is widely found throughout the continent and their shallow mortars and mullers did not greatly differ from those used by the Algonkins.

Their dwellings were houses of bark formed much like an arbor, some with round and some with pitched roofs. Under normal conditions these houses were communal dwellings and large in size. There were no permanent dwellings circular in form, and mud huts or hogans were not used. It is quite apparent that from the earliest times they were an agricultural people, and neither archeology nor the testimony of early explorers or travelers indicates any wide difference in their village life from that of the Indians of Virginia and the Carolinas, for example. They relied very largely upon vegetable foods for their sustenance and the cultivation of the ground was regulated by certain customs. It appears that the Iroquois were

far more like these Indians of the middle south in their village life than the Indians of the north, the Micmac, or the Malecite.

Of considerable importance in the study of comparative archeology, and we believe in the study of the origin of the Iroquois, is testimony of implements of pottery and smoking pipes. Iroquois pottery is perhaps the most durable and striking material found on their village sites or in their graves, and in both decoration and form is distinctive from most forms of pottery used by Algonkins. Before discussing this subject further, it may be well to state there are two general forms of Iroquois pottery, that is to say, there are two archeologic districts which yield pottery, which may be compared. The first and westernmost is the Huron-Erie area and embraces the Iroquoian sites on the Niagara peninsula in Ontario and the adjacent land to the west of it and north of Lake Erie, including also the territory in New York along the southern border of Lake Erie to the hilly land south of it. The second area is the Mohawk-Onondaga, and takes in the region of the St. Lawrence basin, the east shore of Lake Ontario, the south shore of the Oswego river, southward along the Seneca river, southward through the Susquehanna valley and eastward through the Mohawk valley. In the first district the outline of the pot does not show the high collar projecting so far from the neck as is common in the second district. In many cases the collar is a very narrow band and ornamented by parallel lines or by simple oblique lines, or none at all. In another variety the lines are formed in chevron patterns, but in larger plats. (For comparisons see pl. 5.) In this form the collar does not project very much from the body of the pot, and the decoration is carried down well on to the neck. There are instances where the triangular patterns and short lines follow a line of oblique lines drawn around the body of the pot below the rise of the neck. Such patterns are found on the vessels from Ontario and figured by Doctor Boyle, and by myself from Ripley, Chautauqua county. In the second district the wide overhanging collar becomes almost a fixed characteristic. Here it reaches the highest form of its special development and archeologists usually describe one of these pots for their ideal Iroquoian form. The pots in the first-named district usually have the more squat body and bulging sides. A careful comparison between the pottery vessels found by the writer at Ripley, N. Y., and those pictured by David Boyle as having been found by the Laidlaw brothers, in the sites along Balsam lake,

Ontario, Canada, will show that while a general outline and form of the body is similar to the pottery of the Mohawk-Onondaga area, there are differences enough to warrant placing each district in a place by itself.

Certain forms of the Iroquoian pottery, as in western New York, does not greatly differ from those discovered in the mounds of Ohio, especially certain pottery forms described by Professor Mills of Ohio State University. The forms to which we refer are those having a globular body and short neck and a wide flaring mouth, the entire surface of the body being decorated with the marks of a paddle wrapped with grass stems, or brushed while still plastic, with the same material. Large fragments of such pottery were found by the writer in the prehistoric site at Burning Springs where they were intermixed with sherds of more conventional Iroquoian types. Some of this pottery does not differ materially from certain forms of Algonkian pottery except in the matter of shape. None of the pointed bottoms is found in the Iroquoian district in New York. Many Iroquoian vessels are small, containing not more than two quarts, while others are larger and have a capacity of several gallons. Complete vessels of the larger type are very rare but many hundreds of sherds of large vessels are found throughout Jefferson, Ontario, Erie, Montgomery, and Chautauqua counties.

In the study of the design found on the typically Mohawk pottery it seems apparent that the parallel lines arranged in triangles represent porcupine quill work such as is found on the rims of bark baskets. There are certain other features of Iroquoian pottery that lead one to believe that potters in making their vessels had in mind bark baskets. The square-topped collar is not dissimilar in form to the square top of the bark basket, and the dots placed around the upper edge seem to imitate the binding of the wooden rim of the basket. Oftentimes dots around the center of the body, at the beginning of the neck, seem like the stitch marks seen on bark basketry. This idea was first advanced by Frank Cushing, who gives a figure of an Iroquois basket which he says was copied in clay by potters. We believe that the idea is correct, but the Iroquois of historic times did not use bark baskets or vessels of this character. All their baskets that we have seen have had flat bottoms and in outline were more or less oval at the top. Other pottery patterns, such as those found throughout the Seneca district and western New York, have a narrow rim, on the lower side of which

IROQUOIAN POTTERY OBJECTS

In the top row the face effigy is from the corner of a pot rim. All other specimens are complete or fragmentary pipes of the Genesee Country area

is a series of notches or projecting teeth. Sometimes this rim is devoid of these projections and has oblique parallel lines drawn at distances to the edge of the rim. This form is similar to the ordinary bark basket simply bound with an ash splint and an elm bark tape. It is of value to note for comparative purposes that the quilled or chevron pattern is far more prevalent in the Mohawk-Onondaga district than it is in western New York, or in the Seneca-Erie region.

It is of great importance to note that Iroquois pottery never has a circular or scroll-like design such as is found upon the pots of the south and upon certain Ohio village sites. The absence of any curved decorations or scroll designs is significant and is one of the things which points out a deliberate attempt to avoid the distinctive art of certain other tribes.

All Iroquoian pottery seems to have been built by the coil process, that is to say, it was formed by coiling ropes of clay upon a base and then worked into the desired shape by continuing the coiling process. Very few pots were blackened by pitch smoke, although some pipes were treated with this process.

Smoking pipes. Smoking pipes of both stone and clay are numerous in the Huron-Iroquois area. There are several general forms, but all bear striking resemblance to one another.

Iroquois pipes seem much different from those found in any other archeological area, and it does not appear at first thought that they were derived from any other forms except perhaps the smaller tubular form with its end bent upward at an angle. There are certain features, however, of Iroquois pipes that remind one of pipes of contiguous tribes. It will be noted that the monitor pipe of the mound-builder region has a bowl which resembles an oval vase with a flaring rim. The bowl is set down into the platform, the whole pipe of course being monolithic. The Iroquois did not use the platform pipe, as we have previously remarked, but they did employ every form of the stone bowl used on platform pipes. The bowl, however, was built in all its lines much like the monitor type, but submerged into the platform stem. The same remark applies to certain forms of effigy pipes where the bowl has an animal head projecting from it. Certain forms of Iroquois clay pipes have similar bowls but with a stem of the same material projecting from it. The Iroquois did not have anything identical with the mound types with beautifully formed effigies of complete birds, toads,

frogs, and small mammals, such as are featured by Squier and Davis.[1] There is just one important exception to this statement, and it is that relating to the cruder form of effigies found on platform stems. On early Iroquois sites effigies of this kind are found in the so-called lizard or panther pipes. The platform, however, has disappeared and the bowl and the effigy have a different orientation. The effigy seems to have clung to a narrow strip of the platform which appears in the shape of a small stem, and the stem hole is drilled in the back of the effigy, the bowl of the pipe being drilled down through the top of the shoulders into the body of the effigy. The drilling shows in most cases a large conical or beveled hole. Other effigy forms show no traces of the platform or rod, as in the case of the lizard pipes which perch upon their own tails, but are conventionalized forms of birds, generally an owl, having the body at the shoulders drilled for a bowl and the stem hole drilled in the lower part of the back. Oftentimes in the front of the pipe a conventionalized projection is made to resemble the feet. These bear a perforation from which, no doubt, were suspended ornaments. Other forms of mound pipes used by the Iroquois without any alteration are those from the Erie region resembling animal claws and those modeled along cubical lines with a short stem base for the insertion of a reed. Iroquois and mound pipes interpreted and compared in the light of these observations show in general concept a remarkable similarity. They are more alike than are the pipes from the southern states or the Atlantic seaboard.

The stone owl pipe and the lizard pipe, which have been described best by Colonel George E. Laidlaw of the Provincial Museum of Ontario, are found in the early Iroquois sites in New York and undoubtedly sites in the same period throughout the entire Iroquois area. The Province of Ontario has yielded many, numbers of them have been found in New York, still others have been found through Maryland, Virginia, and the Carolinas. Others have been found elsewhere, but only occasionally.

These effigy pipes of the Iroquois in some ways remind one of the Cherokee pipes which have the effigy standing on the front part of the stem. In the Iroquois pipe, however, the stem has been

[1] It must not be forgotten that Iroquois effigy pipes were mostly of modeled clay and the mound effigy pipes of carved stone. Compare the effigies of these pipes, one with the other, and it will be seen how startlingly similar they are, where the same life forms have been imitated.

abandoned and the effigy has either sprung upon or grasped the bowl, or made it a part of itself. It is not difficult to conceive that this type might have been derived either from the Cherokee or mound pipes. A single dream of an old woman of the early tribe widely recounted among the people as a necessary provision demanded by the spirits might cause a modification in any line of material culture. We have only to examine the history of the modern drum dance of Ojibway and middle plains tribe to discover how a dream can institute a custom that becomes widely known and followed.

Iroquois pottery pipes are among the most interesting forms of their ceramic art and some of the best modeling is found in them. They bear upon their bowls the effigies of birds and mammals, animal heads, human heads, and representations of earthen pots and other objects. They are far more complex and made with greater care than are the Algonkian pipes. Iroquois clay pipes in fact are the most carefully made and best modeled clay pipes made by the aborigines of North America, north of Mexico. There are certain features about them that give a hint of the customs and costumes of the people who made them; for example, they show that the skin robe with the animal head still upon it was worn as a blanket and headpiece; they give an idea of facial decoration; they represent masked figures with their hands to their lips blowing, as in the false face ceremony, or they reveal their totemic animals. Some of them have numerous human faces modeled upon the stem and bowl and both the form of the face and the concept is still carried out by some of the Iroquois today, especially the Cayuga, who carved these faces upon gnarled roots as charms against witches.

The most common type of pipe among the Mohawk-Onondaga group is that having a flaring trumpet mouth. The Seneca-Erie, on the other hand, including the Hurons of the north, commonly used pipes having a cylindrical bowl upon which was a long collar decorated by parallel rings.

Early types of both clay and stone pipes made by the Iroquois show a type of decoration made by rectangular slots arranged in series. These slots, it has been suggested, were inlaid with pieces of colored wood or shell. None so arranged, has yet been found, so far as we are able to state. This slotting is a characteristic feature in certain early pipes.

Certain forms of pipes show how widely prevalent certain con-

cepts prevailed among the Huron-Iroquois. Briefly, there are the owl-faced pipe, the blowing pipe with the human face, the ring collar pipe, the square top pipe with the flaring collar, the trumpet bowled pipe and others. It appears that Iroquois pies are a unique part of their culture.

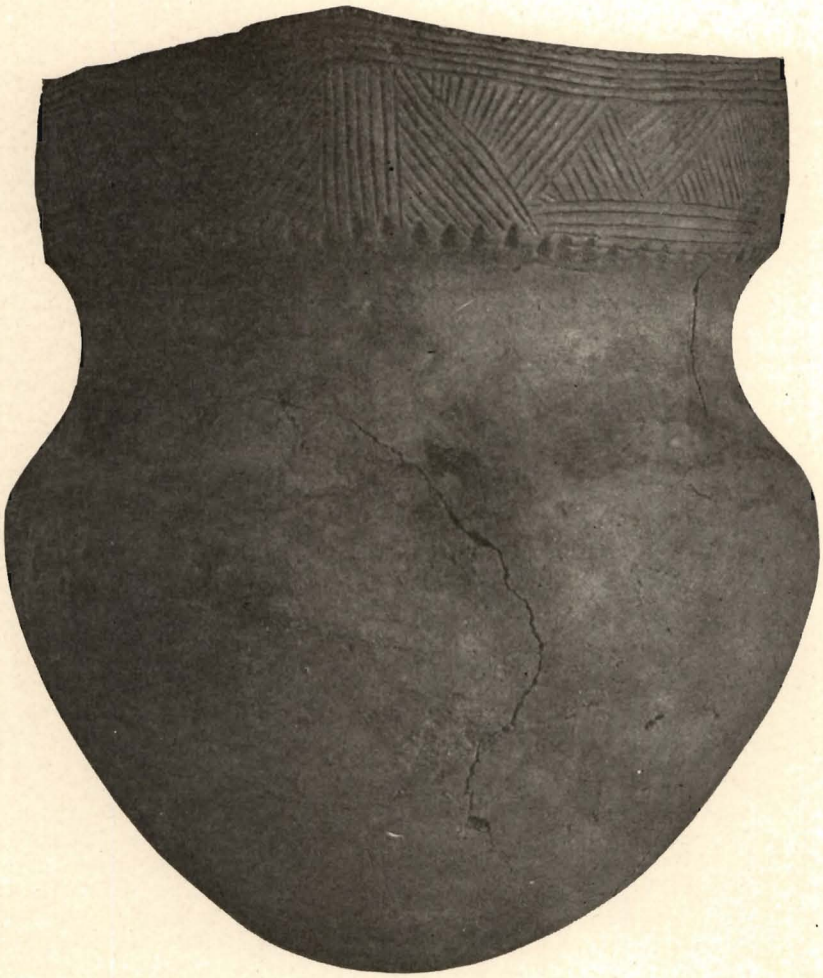
It is interesting to note the methods by which the stem holes of Iroquois pipes were produced. Probably the majority have had the hole punched through the stem while the clay was yet plastic but there are many specimens that show that the clay was rolled or modeled over a small reed, straw, or a wisp of twisted grass. When the clay was burned, the reed or grass burned out and left the stem hole.

The Iroquois as a means of interpreting culture. The Iroquois were in the Genesee Country when it was opened to white occupation. Not only did their ancient sites remain, but in 1650 more than 10,000, in all probability, occupied the region from the Finger Lakes to the Niagara Frontier and the Chautauqua region. These include the Erie, the Neutral, the Wenroe, the Seneca and Cayuga. Early missionaries, as the Jesuit fathers left valuable accounts of these people in their *Relations*. To these missionary records present day historians owe much.

Serious study of the culture of the Iroquois did not begin until the middle of the 19th Century, when Squier and Davis, Henry Schoolcraft, and finally Lewis Henry Morgan began to make investigations. Morgan's classic work, "The League of the Iroquois," did much to direct attention to the inestimable value of ethnological research. His studies of the Seneca people living in the Genesee Country provided new incentive to study the customs of native peoples, and, as a result, an entirely new interpretation of the history of mankind in general began to unfold.

Iroquois sites somewhat later began to receive attention and beginning about 1895 it was possible to differentiate somewhat the Algonkian and the Iroquoian occupations. Much more remains to be done for only the preface of the history of our aborigines has been read and recorded. Most of our conclusions are but tentative and as other sites are excavated, our array of facts may need modification.

From what has been gleaned from the present-day Iroquois of the past 75 years, many customs have been recorded that throw considerable light upon all Eastern American archeology. Beginning



IROQUOIS POT

This represents a typical Iroquoian pottery vessel of the eastern area. Note the incised decoration of the collar and the constricted neck of the vessel. This specimen was found on Manhattan Island. Height: 13 inches

Courtesy of the American Museum of Natural History

with the Iroquois we may then reason back from the known to the unknown, basing our comparisons upon assured facts. This relieves the archeology of our particular area of much of the guess work that characterizes other regions. Even now, with 5,000 Iroquois still residing in the Empire State, there is ample opportunity for linguistic and ethnological study, and the possibility of finding many new facts of value to the study of pre-history.

The Problem of Chronology

The problem of chronology in America is a complicated one. There does not exist in the New World the same conditions and identical examples of cultural evolution which may be found in western Europe. It is, therefore, impossible to speak of American archeology in the same terms employed in the Old World. We have no paleolithic age, no Neanderthal skeletal remains, no Chellean implements. Only in Mexico and Yucatan do we find exact dates that may be compared with those of the Christian era.[1]

At best we may only differentiate our culture sequences and seek to determine which appear older. When we leave the historic or contact period dates are only approximations, yet, even so, they have the merit of assisting in visualizing the time element.

The earliest European explorers of the Columbian period, found the Atlantic seaboard from the mouth of the St. Lawrence to Georgia in the possession of a people whom we may definitely recognize as Algonkian. Explorers who penetrated the New York area and central Pennsylvania found tribes of the Iroquoian linguistic stock. Trading began and European cultural influences were soon felt by the aborigines. The immediate pre-contact period, therefore, for both Algonkian and Iroquoian peoples of New York closed about the year 1609.

Taking the Iroquois first, we may inquire into their history and traditions for earlier data. It will be found, many believe, that for nearly half a century previous to white contact they had undergone a transformation that eventually brought about the establishment of the Iroquois League in about the year 1570.

For information previous to this time it is necessary to take the evidence of archeology. Iroquoian sites that are purely aboriginal in culture may be traced fairly well from the recent to the pre-contact, and even further into prehistoric times. This is made

[1] Cf. Wissler, The American Indian, 270. New York, 1917.

possible by the fact that the Iroquois changed their village sites every ten or twelve years. In some instances, as the Ontario County the Richmond Mills site can be traced in a migration to at least two subsequent sites. Its earlier location may even be assigned.[1] This series of Seneca sites, therefore, may be traced back to what is probably the pre-confederated period.

The very definite culture of the Iroquois, the number of their locations and their traditions all being considered, it would appear that the date of their coming into this area may be fixed somewhere about the year 1300. This is about 300 years before the coming of the French, English, and Dutch explorers. It is also probable that for at least a full generation before this date advance groups of the stock were looking over the region and planning to dispossess the Algonkian peoples who claimed it.

The Algonkian sites into which the earliest Iroquoian settlements intrude, are similar in most details to known coastal Algonkian sites. Inasmuch as no European artifacts are found on these Genesee Country Algonkian sites, we may safely assign them to the pre-contact period. We may even postulate that with the advent of the Iroquois and the ascendency of these people, the Algonkian tribes were driven out.

The story of the earlier Algonkian peoples is now a matter of cultural changes. The later Algonkians were a people having a definite type of pottery. Their culture is easily recognizable by all students. Because of the definite characteristics of the immediate pre-Iroquoian Algonkian culture it has been tentatively called the "third Algonkian period." Coincidental with it and running back for at least three centuries (?) is the so-called mound culture, a culture also definite in character and easily distinguishable. Both peoples undoubtedly lived in adjacent areas and probably carried on a desultory warfare against each other. The third Algonkins without much doubt received a great cultural impetus from these intruders from Ohio. Tentatively we may date them from 1300 back to the first half of the tenth century, say, 950. This would give the mound culture two hundred fifty years in this region, an estimate which is not intended for any other area. Mound culture Indians were never numerous in New York and two hundred fifty

[1] Cf. Parker, A Prehistoric Iroquoian Site at Richmond Mills, Researches and Transactions of the N. Y. State Archeological Association, Vol. 1, No. 1.

years of occupation seems sufficient to account for the remains of these people in the Genesee Country.

Back of the later Algonkian peoples were earlier ancestors who seem to have occupied this region for a long period of time. It is so extensive and wide-spread that it may date back at least 4,000 years. This of course is an approximation, only, and hangs upon very slender threads of actual evidence. It is into this horizon that the Eskimo-like people intruded.

Still more remotely were other Algonkinoid peoples whose simple culture seems to have gradually evolved until it blends with that of the second period. We can only conjecture how far back they extend in time. Here it is necessary to correlate our approximations with the hypothetical date of the coming of man to America, conservatively set by some as at least 10,000 years ago.[1] A study of the distribution of the Algonkian stock sweeping eastward from the Rocky Mountains near the Canadian line would lead to the inference that it should not have taken more than three or four thousand years for bands of early people to have reached the Atlantic seaboard. It would be strange indeed to believe that the west coast had a population eight to ten thousand years ago and that the east coast should have remained totally unknown to man two or three thousand years thereafter. Certainly many implements and sites of early character appear in point of antiquity the equal of those in early neolithic Europe. For example the lower strata of the Lamoka Lake site, explored by the Rochester Municipal Museum yielded implements of bone and stone that compare in appearance with many specimens from the early neolithic sites of France. We cannot regard mere appearances, however, as solid evidence, without additional data to guide opinion. Geologists may be of considerable assistance in determining probable age and indeed some are now beginning to take much interest in American archeology.[2]

Some American anthropologists are now devoting much thought to the problem of chronology, notably Wissler, Hrdlicka, Kroeber, MacCurdy, Spinden, Cook, Sapir and Goddard. In his article in the *American Anthropologist* (Apr.-June, 1927), Goddard says, "If the less evident relationships which have been recently pointed out by Kroeber and Sapir are actual and some of them probably are,

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[1] Cf. Kroeber, Anthropology, 344.

[2] Cf. Figgins, Antiquity of Man in America, Natural History, Vol. XXVII, 229; Cook, New Geological Evidence, Ibid. 240. New York, 1927.

they go far back of this readjustment of peoples and may be due to separations of 100,000 or more years ago." Goddard is here speaking of linguistical differences between the various American groups.

Spinden seems more conservative and presents a diagram suggesting a chronology dating some 10,000 to 15,000 years B. C. He bases his graph largely upon culture traits, stressing agriculture.[1]

American archeologists for the most part have been conservative, and rightly so, perhaps, for theories should be constructed upon the logic of evidence. It is only recently that recognized experts have been bold enough to argue for an antiquity dating back more than two or three thousand years B. C.

The position assumed by the authorities cited above make it easier to project man in the Genesee Country further back than the Christian era. At least a thousand aboriginal localities are to be found in the Finger Lakes-Genesee Country, four or five hundred being listed in the four counties adjacent to Rochester. The fact that in the older sites there is little variation seems to argue for a greater antiquity than ordinarily assumed, for as early man progressed but slowly, and for several thousand years his artifacts and habits of living underwent little change. It is only as the historic age approaches and the great cultures of Mexico and the Mississippi Valley arose that the more primitive people of this region felt the influence of a new culture impetus. Only then are rapid changes in cultural traits seen. Mexico must have exerted an immense influence upon the people to the north. The rapidity of this change has possibly blinded some to the long era of culture monotony that preceded it.

Summary

The Genesee Country and the contiguous area to the east has been occupied from comparatively remote times by various peoples having cultural differences that make possible the classification of their remains and artifacts. Moreover, from the evidence produced by M. Raymond Harrington, Alanson B. Skinner, Frederick Houghton and the present writer, it is possible to state with some degree of certainty the various culture sequences.

The archaic Algonkian people appear to have been the first to enter this region, being succeeded by another wave of their stock

[1] Cf. Kroeber, *Anthropology*, graph facing p. 342.

having a richer culture and bringing with them the art of pottery making. These people also appear to have practised agriculture including the raising of tobacco. A third wave of these people then spread their culture over the region and made their occupation easy to identify because of the excellence of their pottery ware and elbow smoking pipes.

When these Algonkian people were well established an influence from the Ohio region seems to have crept in, bringing with it the custom of rearing small mounds. Much of the raw material, as flint (chert) and banded slate seems to have been brought in from Ohio localities.

About three hundred years before the era of the French and Dutch along the St. Lawrence and Hudson the Iroquois seem to have established themselves in this region and to have driven out or absorbed the Algonkian tribes and possibly the wandering banks of mound culture people. The material culture of the Iroquoian people, including the Huron is distinctive and so markedly different from the Algonkian that it is easily recognized. The Iroquois people established a Confederacy about 1570 vestiges of which still remain to influence about 5,000 Iroquoian people now within the Empire State. At present the Iroquois are all but deculturated.

The field of Genesee Country archeology is eminently worthy of detailed study. It should be carried on only by qualified experts and recognized institutions. The numerous technical problems involved and the delicate cultural differences make the work of the amateur merely vandalism that leads to the destruction of important sources of knowledge.

So much has already been ruined by the well-meaning but destructive methods of untrained excavators that the field is limited and nearing exhaustion.

In point of time the occupation of this region may well date back three or four thousand years before Christ and even more, for it is not at all probable that eastern North America was unknown to man at so late a day as the rise of the Egyptian and Babylonian dynasties. Mexico had well established tribes and the beginning of a civilization several hundred years before the Christian era. This means an even earlier period of cultural evolution. It is generally believed [1] that the earliest groups of mankind came into America by way of the north Pacific coast at least as early as 10,000 years

[1] Cf. Handbook of American Indians, Vol. 1, Antiquity, p. 59. Hrdlicka.

ago. That it should have required five thousand years for man to cross the continent and find this region does not seem possible. The roving nature of early man coupled with his curiosity and daring would have soon led tribes across the continent. Indeed the range of the Algonkian people seems to indicate their sweep eastward at fairly remote times. How remote these first comers were in point of time we may only conjecture, and if dates are set, these only indicate the range of possibility. They constitute the trial stakes in a survey, that may be removed again and again until the real facts are established.

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