A QUEST FOR MEANING AT THE EARLY 16TH-CENTURY ST. LAWRENCE IROQUOIAN MAYNARD-McKEOWN SITE

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ABSTRACT

The Maynard-McKeown site is an early 16th-century St. Lawrence Iroquoian village situated near present-day Prescott, Ontario. During the summer of 1987 approximately a quarter of the 1.6 hectare settlement was excavated, including all or portions of twenty-three longhouses, multiple palisades, a defensive ditch, two sweatlodges, and numerous other features of social significance. To date, this site constitutes the largest excavation of a St. Lawrence Iroquoian site in either Canada or the United States and the only such site that has produced evidence of trade with Europeans. It is also one of only a few sites attributable to what was probably a confederation of tribes for which strong contextual data exists. The availability of these data presents the as yet rare opportunity to assess hypotheses concerning the past behaviour of this now culturally extinct people.

Historic and ethnographic evidence indicates that past Iroquoian cosmology was premised on the tenuousness of human and horticultural vitality and the means by which these could be addressed for the betterment of the populace. Commonly expressed through an emphasis on such opposing dualities as men and women, destruction and creation, hunting and horticulture, and extra-societal influence versus intra-societal influence, these efforts were ultimately perceived as complementary and, consequently, socially sustaining.

Material culture and settlement pattern data from the Maynard-McKeown site was used to gain an improved appreciation for some of the ways in which this cosmology is reflected in the archaeological record. In particular, attention was paid to the interpretation of individual ritual features, purification structures including the two aforementioned sweatlodges and a possible woman's house, longhouses for indications of clan ownership, and material culture iconography. Analysis was facilitated through extensive recourse to extant historic, ethnographic, and archaeological evidence concerning other Iroquoian sites and cultures.

RÉSUMÉ

Le site Maynard-McKeown regroupe les vestiges d'un village d'Iroquoïens du Saint-Laurent. Trouvé près de la ville actuelle de Prescott, en Ontario, ce site date du XVIe siècle. Pendant l'été 1987, environ le quart de ses 1.6 hectare a été fouillé. On y a fouillé des parties ou l'ensemble de 23 maisons longues, plusieurs palissades, une tranchée, deux huttes à sudation et de nombreux autres vestiges ayant une portée sociale. Aucun autre site Iroquoïen du Saint-Laurent n'a donné lieu à des fouilles aussi extensives que celui de Maynard-McKeown ; c'est aussi le seul à fournir des preuves d'échanges commerciaux avec des Européens. De plus, il s'agit de l'un des seuls sites qui comporte d'importantes données contextuelles et que l'on puisse attribuer à cette confédération de tribus. Ces données permettent maintenant d'évaluer des hypothèses au sujet du comportement ancien de cette population dont la culture s'est éteinte. Ainsi, selon des sources historiques et ethnographiques, la cosmologie iroquoïenne aurait été axée sur la précarité des récoltes et de la vie humaine, ainsi que les stratégies pouvant contrer cette précarité au bénéfice de la communauté. Ces efforts étaient exprimés à travers des dualités perçues comme complémentaires et donc positifs pour la société, telles que le masculin et le féminin, la destruction et la création, la chasse et l'horticulture, et les influences venant de l'intérieur et de l'extérieur de la société. Cette reconstruction de la cosmologie iroquoïenne est enrichie par l'examen de ses vestiges matériels et par des données sur la disposition du peuplement. Plusieurs éléments du site ont été analysés en cette optique, par exemple des vestiges à portée rituelle, des structures visant la purification telles que les deux huttes de sudation et une maison attribuée aux femmes, des maisons longues pouvant comporter des indices d'appartenance à un clan, et l'iconographie de la culture matérielle. Cette analyse fait également appel aux publications historiques, ethnographiques, et archéologiques qui décrivent les divers sites et cultures iroquoïens.

DEDICATION

I dedicate this thesis to Dr. James V. Wright and Dr. Bruce G. Trigger. The legacy they leave is one of solid scholarship produced by minds of wide-ranging interests and corresponding perspective, commitment to the growth and development of Canadian archaeology, and dedication to the ancestors whom they served for their lifetimes and have so recently joined. I honour and sorely miss them both. Yet...

"Tho' much is taken, much abides; and though
We are not now that strength which in old days
Moved earth and heaven; that which we are, we are;
One equal temper of heroic hearts,
Made weak by time and fate, but strong in will
To strive, to seek, to find, and not to yield.

Alfred Lord Tennyson, *Ulysses*.

Dr. James V. Wright (1932-2004)

Dr. Bruce G. Trigger (1937-2006)

ACKNOWLDEGEMENTS

For me, the journey that has so many years later culminated in this thesis began when I was hired as a cataloguer at the Maynard-McKeown site during its excavation in the summer of 1987. That mammoth undertaking would not have been possible without the extraordinary effort of two individuals, the late Dr. James F. Pendergast and my mother Dawn M. Wright. The project itself was initiated by Jim who adroitly negotiated an incomprehensibly complex labyrinth of government bureaucracy, native politics, and funding agencies in order to procure the necessary permissions and financial support. Although he was not able to produce a report on the site before his death from cancer in 2000, he did author several articles dealing with its excavation either in whole or in part. Dawn, who had been involved in the Nodwell site excavation and was, therefore, one of the few people in Ontario at that time with large-scale Iroquoian site excavation experience, directed the field operations. Without her dedication, only a fraction of what was excavated that summer would have been uncovered. That so much was accomplished in those few short months is truly remarkable given the frequent redirection of her energies, and those of her crew, to hosting literally thousands of visitors to the site including school children by the bus load, television, print, and radio reporters, North American scholars, an international congress of quaternary scientists, and interested locals. It was also she who insisted that nearly twenty-seven tonnes of feature fill be transported to her home where she and my late father, Dr. James V. Wright, processed it over the course of two subsequent summers. They did this *gratis* for the benefit of our collective understanding of St. Lawrence Iroquoian archaeology as no granting body was willing to provide support for such an undertaking. With regard to the preparation of this thesis, her knowledge of the site and the procedures implemented in its excavation has been of incalculable assistance. Others who contributed to the excavation of the site that summer include: Jerome Cook, Arnie Feast, Marylou Gervais, Julie Galbraith, Jennifer Grover, Gretchen Keenan, Connie O'Shaugnessy, Paul Prince, Lisa Rankin, Francis Scardera, Steve Sunday, and Brent Wimmer. Part of the faunal collection was later contracted out to Ostéothèque de Montréal for analysis and I would like to thank Michelle Courtemanche for providing me with a copy of the resulting report.

Dawn Wright and Jim Pendergast during the 1987 excavation of the Maynard-McKeown site.

Although the present document does not replace the need for a descriptive site report, it does constitute the first major study of the site's settlement pattern and material culture. The possibility that I might do this did not actually occur to me until sometime after Dr. Bruce G. Trigger invited me to apply to the PhD programme at McGill University. Although his illness and subsequent death prevented his direct input on this project, he approved the topic. I would like to think that he would approve the result, too.

Shortly before Bruce's death from cancer in 2006, Dr. Michael S. Bisson kindly agreed to take his place as my doctoral advisor. That he was willing to do so means everything to me and I thank him most sincerely. I would also like to thank he, Dr. Andre Costopoulos and Dr. Claude Chapdelaine for all of the assistance they rendered to me during the course of researching and writing this thesis. Several suggestions have been implemented in the final version that greatly improves it. In addition, Claude graciously offered me the use of a map of St. Lawrence Iroquoian sites originally published in his book, *Le site Mandeville á Tracy: Variabilité culturelle des Iroquoiens du Saint-Laurent* (1989). It is a marked improvement over that which it replaced. I would also like to thank Dr. Colin Chapman, Dr. Nicole Couture, Dr. William Engelbrecht, and Dr. George Wenzel for their comments on this thesis. Melanie Poupart ably translated the abstract.

The records and material culture associated with the Maynard-McKeown site are curated at the Canadian Museum of Civilization in Gatineau, Quebec, and several people there provided me with assistance, insight, and encouragement. Always first and foremost among these are the friendly, and ever efficient, Library and Archives staff. In particular, I would like to acknowledge Sarah Prower who never complained when I made any one of my numerous requests for archival material, despite the fact that it meant hauling large boxes and files out of storage and returning them when I was done. In the former Archaeological Survey of Canada, now unfortunately reduced to a combined Archaeology and History Department, I want Dr. David Morrison, Director, and Dr. Jean-Luc Pilon, Curator of Ontario Archaeology, to know how much I appreciate their facilitation of my research. Dr. Robert McGhee, who was at that time the Curator of Western Arctic Archaeology but is now retired, read my research proposal and offered several good suggestions. Colleen McGuire provided access to the accession records for the site, photographs of those items included in traveling exhibits, and ensured that I had access to the site materials themselves.

For their scholarly expertise on particular issues of significance to this thesis, I extend my sincere appreciation to Dr. David Sanger, Emeritus Professor of Anthropology and Quaternary Studies at the University of Maine, Janet Young, Physical Anthropology Researcher at the Canadian Museum of Civilization, and Dr. Matthew Betts, Curator of Atlantic Provinces Archaeology at the Canadian Museum of Civilization. Dr. William D. Finlayson of This Land Archaeology Inc. generously provided photographs of Maynard-McKeown site artifacts given to him many years ago by Jim Pendergast. Dr. Ronald J. Mason, Professor Emeritus of Anthropology at Lawrence University and Dr. Richard M. Gramly of the American Society for Amateur Archaeology both kindly sent me copies of

books they respectively authored which were well consulted in the course of preparing this thesis.

Finally, and as always, I thank the Ancestors. All that I do is for them.

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CHAPTER ONE: INTRODUCTION

Why Study Meaning?

Like a great work of fiction that has layers of increasingly complex meaning, there is more to the story derivable from archaeological evidence than the bare facts as they pertain to pragmatic topics like subsistence, settlement pattern, and the function of artifacts. Humans manifest cosmologies constantly and in a great variety of ways, through: dance, song, prayer, ritual, symbols, art, games, and so on *ad infinitum*. For the archaeologist, only some of these are expressed materially and fewer still survive the destructive influences of time. In the pages that follow, both ritual contexts and symbolic material culture will be discussed as evidenced at the early 16th-century St. Lawrence Iroquoian Maynard-McKeown site. Yet, acknowledging the special nature of ritual which is culturally significant but often relatively rarely expressed (belying the standard equation in archaeology of that which is common with what is significant), it is necessary in conducting research of this nature to look further afield in the hope of identifying patterns of occurrence that are only discernable with multiple expressions of the phenomenon under examination. Likewise, it is necessary to utilize all sources of potentially relevant data whether they are archaeological, ethnographic, or historic. Meaning potentially resides in all human behaviour and perception. Even that which is seemingly pragmatic can have shades of intent beyond the merely functional.

Interpretation of Meaning

In the mid-19th century John Lloyd Stephens traveled to the ancestral homeland of the Maya and was captivated by the hieroglyphs that he saw there (Robinson 2002:109). An earlier trip to Egypt convinced him that, despite their differences, the Mayan hieroglyphs similarly denoted a written language: "No Champollion has yet brought to them the energies of his inquiring mind. Who shall read them?", he asked (Robinson 2002:109). But while the bar-and-dot form of Mayan numerical notation was understood in the 19th-century and the number hieroglyphs in the 20th, the scholarly community resisted Stephens' hypothesis that the rest reflected anything more than "…cabalistic symbols, designed for the rituals of some esoteric cult" (Robinson 2002:111-112). The three foremost decipherment texts published in the 1960's and 1970's, for example, did not even mention the Mayan glyphs and the preeminent Mayanist J.E.S. Thompson expressed doubts that the glyphs represented a written language right up to his death in 1975 (Robinson 2002:107, 111, 122). In the almost century and a half that it took for Stephens' hypothesis to gain the credence necessary to inspire proper investigation, our understanding of Mayan culture was severely and needlessly retarded. Personal limitations and cultural bias aside, this raises issues central to research concerning past meaning: (1) how we know that something was meaningful, (2) how we assess the nature of that meaning, and (3) how we approach an understanding of meaning.

Whereas George Lakoff and Mark Johnson state that the foundation of an understanding of human thought lies with the human body, they argue that further

comprehension of the mind can only be derived from the recognition of the importance of metaphor (1999:3, 16). This is because virtually all thought, with the exception of the most rudimentary conceptions, is metaphorical (Lakoff & Johnson 1999:65-67). A metaphor is defined as something that is understood through reference to something else. Examples of a type with which most people are familiar include: "a deeper understanding" (depth with comprehension), "hot temper" (temperature with emotion), and "blind eye" (lack of sight with ignorance). But these are literary metaphors and Lakoff and Johnson argue that they are just the tip of the iceberg – so to speak. Primary metaphors, they say, are automatic, largely unconscious, associations of physical experiences or observations and concepts, like affection with warmth ("smile warmly") or time with movement (time flows) (Lakoff & Johnson 1999:45-59). Complex metaphors are combinations of primary metaphors that allow us to interpret and understand new and abstract concepts (Lakoff & Johnson 1999:49, 60-61). For this reason they also assist communication and, where visual imagery is involved, memory (Tilley 1999:8). For example, many people conceptualize atoms and their orbiting electrons as "planets spinning around a nuclear sun" (Root-Bernstein 2003:573).

But perhaps the most relevant point to be derived from Lakoff and Johnson concerns cultural constants: "…mental images do not necessarily vary wildly from person to person. Instead, there are conventional mental images that are shared across a large proportion of the speakers of a language…a significant

part of cultural knowledge takes the form of conventional images and knowledge about those images" (Lakoff & Johnson 1999:69).

The idea that such basic levels of thought may be consistent from person to person and that culture reflects this is naturally alluring for anyone involved in the social sciences. This may be said to be particularly true of archaeologists because, according to Lakoff and Johnson, material culture reflects these tenets of mind thereby creating what Tilley calls "solid metaphors" (Lakoff & Johnson 1999:63; Tilley 1999). Unfortunately, Lakoff and Johnson state very clearly that their research concerns present-day Western culture and the metaphors consistent with that do not pertain to other cultures or temporal periods: "Meaning is simply different in each language and culture, because the fitting of the signs of a language (signifiers) to things signified is arbitrary…Meaning changes over time. What results are new and different conceptual systems with meanings that depend on historical circumstances" (Lakoff & Johnson 1999:466). They conclude that it is impossible to understand people from other cultures or other times (Lakoff & Johnson 1999:466).

In many respects, this is simply naïve. As the historian E.H. Carr would say: "It does not follow that, because a mountain appears to take on different shapes from different angles of vision, it has objectively either no shape at all or an infinity of shapes" (originally observed with respect to the objectivity of historical interpretations) (Carr 1961:26-27). It *is* sometimes possible to know what cannot be directly perceived; for example, humans cannot hear many of the sounds made by dolphins and elephants but we nevertheless know that they exist.

Similarly, a person does not need to be Asian to understand that the colour white signifies death in China or to appreciate that symbols can have more meaning in some cultures than in others; for instance, the colour black represents death in North America but its potency is less than that of the colour white in China (Fontana 1993:67). While it may not be possible for an outsider to experience another culture and/or time as fully as someone born into it, it is possible to learn about the particulars of that culture and/or time from all of the many clues left behind; for example, from folklore, language, and material culture. Meaning does not exist in a vacuum. Nevertheless, Lakoff and Johnson have succeeded in raising awareness of the importance of metaphor. Although metaphorical interpretations are not entirely new to archaeology, the possibility of such meaning being present in any given situation is frequently overlooked and so Lakoff's and Johnson's reminder can only profit future interpretations of past material culture. The implications of this reawakened focus are bound to be far-reaching, particularly as research has shown that even objects generally assumed to be purely functional can be rich with meaning:

> The importance of Ramah quartzite from northern Labrador to the eastern Montagnais bands has, in part, been related to the stone's symbolic significance…For example, the Labrador Inuit name for Ramah quartzite is tunuyak after its resemblance to caribou back fat. Similarly, the eastern Cree name for the widely distributed Mistassini quartzite of north-central Québec is wenopsk or 'stones that look like fat'…As fat, in relative terms, was more important than meat, its association with the stone used to kill and butcher the caribou may symbolize an association between fat and particular stones resembling fat (Wright, J.V. 2004b).

In *Metaphor and Material Culture*, Christopher Tilley stresses the important point that, contrary to Lakoff's and Johnson's assertions, metaphors are

not arbitrary but that, insofar as material culture is concerned, there is always some relationship between the expressed metaphor and a characteristic(s) of the object (Lakoff & Johnson 1999:466; Tilley 1999:28). The quotation cited above, where the significance of Ramah and Mistassini quartzite lay in the similarity of their appearance to animal fat, exemplifies this. Other examples are not difficult to find; for instance, ochre is associated with life because it is red like blood and, without blood, there is no life; the Egyptian god Ra is depicted in art with a circle because the sun is circular and he is a solar deity; and a hearth generally represents hospitality because this is where warmth and sustenance may be found (Fontana 1993:66, 120).

Determining the precise nature of the relationship between the object and its meaning, however, can be difficult. This is perhaps most true of rock art which is often situated in isolated areas far from any other apparent cultural context and, therefore, far from alternative sources of corroborative evidence (Hodder 1986:145). For example, the thirty-three Late Bronze Age Scandinavian rock art panels studied by Christopher Tilley at Högsbyn are located at great distance from contemporary habitation sites and even from other rock art sites (1999:133-135). A single feature was found in association with a rock panel but radiocarbon dates indicate that it post-dates the rock art itself by a considerable margin (Tilley 1999:153-154). Therefore, an understanding of the meaning of the approximately 1,245 motifs on the Högsbyn outcrops cannot be derived from any sort of cultural association (Tilley 1999:135). Nor was analysis of the distribution of the motifs (to determine, for example, which motifs occurred alone and which

did not, which were found in combination, and which overlapped), on the outcrops particularly informative except to indicate that their use was indeed patterned (Tilley 1999:138-142). To take his analysis further, Tilley needed to somehow link the individual motifs to something beyond the motifs themselves.

One of the ways in which he did this involved metonymy. Metonymy, like metaphor, is a figurative expression but differs in that it pertains to situations in which reference is made to a part of a whole in lieu of the whole itself; for example, to "count heads" is to count people as represented by their heads (Tilley 1999:5). Seemingly obvious metonyms for people at Högsbyn were the feet, hands, and shoe-soles motifs (Tilley 1999:142, 150). From this point, Tilley argued that, together with boat motifs, these metonyms were metaphorical of movement:

> A logic of similarity and difference thus connects hands and feet. They are both to do with movement…A number of properties connect hands and feet with boats and shoe-soles. Like hands and feet, boats and shoe-soles are intimately connected with movement, boats on the water, shoe-soles on the land. Shoes worn on the feet enable the body to move on land more efficiently; boats permit more efficient movement on water. They both enable the body to travel further and faster in time and space (Tilley 1999:145).

Another link that was explored concerned the local landscape (Tilley 1999:133). Högsbyn was described as being situated "…more or less in the centre of a network of waterways and lakes to the west of lake Vänern" (Tilley 1999:134). In addition to motifs clearly associated with water, like boats and wavy lines, the sight, sound, and smell of water was observed to be omnipresent while viewing certain panels and this was thought to be significant (Tilley 1999:158-159). Moreover, direction also appeared to be relevant to an

understanding of the motif panels. Tilley argues that the panels constitute a single narrative that was intended to be viewed from a starting point in the south, near the water, and moving north into the hills because, moving in that direction, "…one can normally see the next carved rock in the distance, but the detail of what is actually carved is not apparent until an observer is a few metres or less away. Consequently, the encounter with each carved rock, by which one must pause to look, becomes a process of revelation" (Tilley 1999:145, 153). Also, as the observer moves from the south to the north, certain patterns become apparent: the orientation of boats and wavy lines are starkly contrasted with that of shoe-soles, feet, and humans; humans, shoe-soles, and cupmarks increase as one moves north while circle-crosses decrease; and representations of humans start out as mere stick figures in the south, are replaced by metonyms, and finally become more realistic and frequent in the north (Tilley 1999:149-150, 152, 159, 167-168).

The cosmos provided one final possible link between the motifs and their meaning. Cupmarks were interpreted as representing lunar cycles or years on the basis of their frequent occurrence in groups of six or twelve (the phases of the moon transpire over the course of 29.53059 days before repeating: this is known as a synodic month and forms the basis of our calendar month) (Aveni 2001:72); the circle-cross was thought to signify the "summer and winter solstice and the spring and autumn equinox" while similar circles with a greater number of divisions were speculated to concern "longer or shorter seasons or periods of light"; and wavy lines (also interpreted as signifying water) were interpreted as symbolizing days or months on the basis of cross-cultural research which shows

that "…in many cultures the moon is symbolized by a snake or dragon because of its motion in the sky, weaving above or below the ecliptic (the sun's path) each month. During the year the moon meanders in a wavy line above and below the celestial equator" (Brennan quoted in Tilley 1999:148) (Tilley 1999:146-148). In support of these celestial/calendrical interpretations, Tilley noted that the rock outcrops surround arable land that previous research has demonstrated is often associated with Scandinavian rock art and hypothesized that such associations might be the result, as cross-cultural studies would seem to indicate, of a "…common preoccupation with the passage of the seasons and solar and lunar observation in small-scale agricultural societies" (Tilley 1999:146-147, 151).

Metonymy, landscape, and the cosmos all provide clues to the interpretation of the rock art at Högsbyn – if not to the meaning of individual motifs, then to the overall context in which they were intended to function. Unfortunately, even with these external sources of data, very little information was available upon which Tilley could base a robust interpretation. As a result, he placed too great an emphasis on insights garnered from cross-cultural research. Such arguments are not strong in and of themselves and should probably only be used when intra-site data suggests their applicability. It may be that some of Tilley's interpretations are correct but more is needed to make them probable as opposed to simply possible. For example, in the case of the circle-cross motifs he examined, his interpretation that they represent the solstices and equinoxes would be strengthened by the observation that they actually "…point in the general direction of the rising or setting points of the sun at the solstices" as has been

observed elsewhere (Aveni 2001:331). Richard Bradley has also suggested that Tilley's research might have profited by the comparison of the progression of human representation against "…the burial cairns which seem to have been located on a continuation of the same route through the landscape" (Bradley 2000:204).

Sometimes, clues to the meaning of material culture come from unexpected sources. Such was the case with a rock art panel at Grotto Canyon in Alberta where the use of specialized photographic techniques and digital enhancement allowed images not easily discerned through fading paint and a thin mineral deposit to be viewed clearly for the first time in perhaps hundreds of years (Magne & Klassen 2002:1; Keyser & Klassen 2001:105-106). As with the rock art at Högsbyn, the landscape was considered germane to the interpretation of the art at Grotto Canyon (Keyser & Klassen 2001:105). Unlike Högsbyn, the native peoples of the Grotto Canyon region have oral traditions pertaining to the origin of the images and their meaning. Of particular interest to Magne and Klassen (2002) were those traditions that concern a series of figures which are more consistent with the rock art of the southwestern United States – one thousand or so kilometres away – than that of the Northwest Plains and Columbia Plateau (Magne & Klassen 2002:1, 7-8; Keyser & Klassen 2001:105-106). These include three anthropomorphs with triangular bodies and "strange shapes instead of legs and feet" attired in headdresses and wielding rattles or other objects, a figure with "rabbit" ears holding a spear and standing near two rows of elk, and a hunchback fluteplayer figure with antennae standing beneath a zigzag (Magne &

Klassen 2002:8, 12; Keyser & Klassen 2001:105-106). The fact that local Stony oral traditions concerning journeys to the Four Corners' region and the taking of war captives coincide with the striking similarity of the figures to rock art created by the Anasazi is intriguing (Magne & Klassen 2002:16-17). The fact that the Hopi descendants of the Anasazi also have traditions relevant to an interpretation of the Grotto Canyon petroglyphs, albeit concerning their ancestors' journey north, is outright remarkable (Magne & Klassen 2002:10, 15-20): "There are in fact one or two clans within Hopi who do claim that their people, their ancestors, went as far as to where there was a lot of snow and ice…These people…marked the places where they had been even for short periods of time" (Magne & Klassen 2002:17).

However the southwestern association came about, it is possible that the hunchback fluteplayer figure of Grotto Canyon represents the *maahu*, or totem of the Flute Clan, variously considered to be a supernatural cicada entity or culture hero (Magne & Klassen 2002:17-18). Conversely, and less probably, it may have had something to do with the Kookopölö *wu'ya* (kachina) (popularly referred to as Kokopelli) (Magne & Klassen 2002:11), a trickster associated with fertility and rain as well as the cicada (Magne & Klassen 2002:11). Further study of the oral traditions of the Hopi and the rock art of the Anasazi could clarify this as well as provide clues to the meaning of the other figures at Grotto Canyon.

Oral histories often pose a considerable quandary for those who tend to underestimate the potential accuracy and longevity of human memory bereft of pen, paper, and a written language. In some situations, this reservation is

warranted. Some cultures, however, emphasize historical recollection to such a degree that events that transpired long ago can be recounted with surprising accuracy. Corroboration from alternate sources of information, an important aspect of all solid research regardless of the nature of the data used, has demonstrated this time and time again. For example, archaeological evidence has established that Paiute stories concerning the existence and characteristics of the former inhabitants of southern Utah, the Mukwitch, are true despite the passage of approximately eight hundred years; geological research has substantiated Tlingit knowledge of glacial advancements, tidal waves, floods, and earthquakes over a period from A.D. 1400 to A.D. 1900; and linguistic as well as geologic evidence supports Athapaskan stories regarding a volcanic eruption around A.D. 720 that led to the dispersal of the local inhabitants and their subsequent development into separate cultures with different languages (for example, the Apache and Navajo) (Moodie et al. 1992:148-150). Occasionally, substantiation can also arise from the convergence of several independent oral traditions.

All potential sources of information about the past have idiosyncratic limitations and oral histories are no different. Not much would be known if scholars avoided archaeological evidence because it is all material or historical evidence because it can be biased. Oral history has a legitimate role to play in the quest to understand the past but, like archaeology and history, it must be used with discrimination. This means that its potential weaknesses must be acknowledged, every attempt should be made to ensure the quality of the evidence used, and where possible it should be buttressed with alternate sources

of data (Mason 2006). Much work remains to be done regarding the interpretation of the Grotto Canyon petroglyphs – for instance, assessing the oral testimony against an understanding of the role of oral tradition in the Stony and Hopi cultures – but the fact that their existence and intimations of their meaning survived in the collective memory of not one but two cultures despite their being obscured and almost unrecognizable is a testament to the potential of the human mind.

Speaking of the 17th-century Wendat, the Jesuit missionary Jean de Brébeuf said: "Metaphor is largely in use among these Peoples; unless you accustom yourself to it, you will understand nothing in their councils, where they speak almost entirely in metaphors" (Thwaites 1959 10:219). To cite only a few examples: the proceedings surrounding ossuary interment were known as the "Feast of the Dead" and its officiator was referred to as "he who eats souls"; blood feuds in response to murder were averted by the presentation of gifts which metaphorically removed the murder weapon from the wound, healed all societal divisions (a feud with any member of a community always had the potential of leading to war) (Thwaites 1959 10:219), and re-established hospitable relations; and the game of Dish, part of Iroquoian cosmogony and often associated with the restoration of health, reflected the gamble that is life and the belief that skill and a personal supernatural power called orenda could change the odds in one's favour (Fenton 1998:45, 116; Thwaites 1959 10:187, 217-221, 257, 33:241-247). There are also several references in the historic literature to what Tilley would call "solid metaphors". For instance:

> …we found upon the banks of the river a plank…and upon this plank had painted the heads of thirty Hurons, whom they [the League Iroquois] had captured…The different lines indicated the quality and age of the prisoners, as some Savages who were there explained to us. They had pictured two heads much larger than the others, to represent two Captains whom they had in their clutches…We also saw the heads of two…children, and of two other young lads who were being taken to the Seminary. They had made stripes in the form of plumes on the heads of the bravest ones. All these heads were scrawled in red, except one, which was painted in black, - a sign that this last one had been killed, and that all the others were victims destined, as it were, for the fire (Thwaites 1959 12:215).

The greatest weakness of Lakoff's and Johnson's research lies in their assumption that cognition can only be studied from the perspective of a single culture. Although culture is assuredly a product of cognition, this approach precluded them from observing the full range of human conceptual expression. As a result, it was not human cognition they were studying but, rather, simply the fundamental principles of present-day Western conceptions. Nevertheless, at the heart of their research rests the reasonable conviction that humans hold certain perceptual and conceptual capabilities in common. This was also the belief of Claude Lévi-Strauss (Leach 1970:21-22; Payne 1996:514). Unlike Lakoff and Johnson, however, Lévi-Strauss chose to approach an understanding of the basic qualities of mind that make us human by seeking commonalities *between* cultures: "The point is…that what is fundamental and universal must be the essence of our true nature…" (Leach 1970:11).

An acknowledgment of the human propensity toward categorization, insofar as it concerns conceptual contrasts forming an overall symmetrical structure, was deemed to be integral to this endeavour (Hodder 1986:35-36; Leach 1970:39; McLeish 1995:714-715; Payne 1996:513; Robb 1998:337). Structure is

a rational expectation in culture because, in addition to being predisposed to categorize, humans are also inclined toward coherence (Audi 1995:133-135; Lakoff & Johnson 1999:17-19). Acceptable explanation in science (the etymology of the word "…means any organized body of knowledge" (Collingwood 1993:249) and other aspects of human thought, is that which imposes or derives order from the complexity of variables observed to affect the phenomena under consideration. Cosmology, as the orderly articulation of a culture's conclusions about the world and the role of its people in it, is an ideal example of this. As for binary oppositions, there can be little doubt that they constitute a significant aspect of human thought (Leach 1970:98). The central theme of many stories is a perpetual battle between good and evil, social unity is premised upon established ideas of what constitutes right and wrong, and until fairly recently division of labour in Western society was a function of gender. According to Lévi-Strauss, the *reason* many of our oppositions strike us as intrinsically logical is because human thinking is based on observations of binary patterns in nature; for example, day/night, hot/cold, and space/time (Leach 1970:15-16).

However, scrutinizing polarities from beyond the confines of a particular culture or time illustrates that some cultural contrasts appear to be arbitrary. For example, the Pythagoreans associated men with odd numbers and "…the right side, which is associated with the limited…the resting, the straight, with light and goodness and…the square" while women were linked to even numbers and "…the infinite, the unlimited (as they are infinitely divisible), the manifold, the

left side…the moving, the crooked, darkness, evil, and…the rectangle" (Schimmel 1993:13). Despite the abiding influence of Pythagoras and his followers on Western culture, these views strike modern minds as irrational. This raises the dilemma of how a scholar raised in one tradition can approach an understanding of meaning created in another tradition when that meaning is perceived as intrinsically illogical. The philosopher of history, R. G. Collingwood, made this point when he stressed the importance of re-enactment to historical understanding: "If you can enter into his mind and make his thoughts your own, you can write his history, and not otherwise" (Collingwood quoted in Lowther 1961:176; see also Collingwood 1978:58-59, 1993:39, 97, 115, 176-177, 202, 215, 282-302). The odds that a scholar will consider potential interpretations alien to his or her customary way of thinking are improved by an awareness of the range of potential conceptual expression instilled by cross-cultural study. For instance, there likely would have been less confusion when the Franciscan Fray Diego de Landa questioned the Mayan nobleman Juan Nachi Cocom about hieroglyphs in the 16th-century if he had sufficient experience to consider the possibility that the glyphs were syllabic rather than, as with his own mother-tongue, alphabetic (Robinson 2002:119-121). Lévi-Strauss maintained that part of the solution also rests with the identification of the opposed conceptions and cognizance that their significance lies in the relationship between them; for example, referring to traffic lights: "…it is the contrast between the colors and the switching from one color to another that provides the information; each color has relevance only in relation to the others" (Leach 1970:22, 44).

While many researchers will consider intra- and inter-site contexts, some will fail to recognize the potential role of the local landscape and the cosmos in the lives of the people of the past. Perhaps this is a reflection of the fact that modern people are segregated from the natural world to a degree never experienced by even their most metropolitan of ancestors. Light pollution in cities impedes the visibility of the stars and the natural rhythms of daily life do not tend to include wildlife or the wider landscape. Even the effects of climate are mitigated. For those who study past culture, it is natural to gravitate to those locations where it is known the ancestors lived their daily lives. Yet, this ignores the fact that these people would have been more aware than we are that their habitation sites were mere enclaves in a wider world – a world that would have been understood, used, and occasionally modified in accordance with their cosmology. For example, on the north shore of Lake Superior numerous Puckasaw pit structures believed to have been used by those on vision quests have been found on cobble beaches near the mouths of major rivers (Dawson 1981:297-299). Likewise, a large standing stone in southern Ontario was said to mark the way to the land of the dead and was apparently once covered in painted images (Thwaites 1959 10:145). The Great North Road of Chaco Canyon is an example of a significant cultural construction, serving more than just a functional purpose, that lies outside the bounds of any habitation site (Lekson 1999:114-123). This road was constructed along the meridian and is one of several examples of Chacoan preoccupation with celestial matters (Lekson 1999:114-123).

For example, a petroglyph on Fajada Butte in Chaco Canyon appears to combine a representation of Pueblo Bonito, a 10th to 12th-century Anasazi town, and solar observations (Darvill 2002:343; Sofaer 1994). Not only is the unique D-shape configuration of Pueblo Bonito reflected in the petroglyph but a line within the image would seem to correspond to an interior wall of the pueblo and a drilled hole to a kiva (Sofaer 1994). Furthermore, "…the petroglyph can be seen to express solar relationships: to the mid-point in the sun's yearly passage and to the mid-point in the sun's daily passage…And, in representing Kiva A, it also can be seen as expressing the nadir and zenith" (Sofaer 1994).

As George Hamell illustrates in the following quotation, spatial context is also relevant to the interpretation of what are known as polysemous or multivocal symbols, symbols that have multiple meanings:

> Shell beads have three analytical cultural attributes. Shell beads have culturally defined forms, functions, and contexts of use. While these attributes are correlate, they are not isomorphic: one form-one function-one context. For example, a single white shell bead may have differing specific functions depending upon the specific cultural contexts within which it is used. Furthermore, these functions may be irrelevant to its formal attribute as a bead. A white shell bead may function as a decorative inlay on a ball-headed warclub, as a medium of exchange in a market context, or as a metaphor of light and life within the context of ritual (Hamell 1989:205).

If the circumstances in which an object is found can reasonably be assumed to pertain to its last use, this context may provide insights into its meaning. Assessing the contexts of different aspects of its use at the intra- and inter-site levels, therefore, can identify the parameters under which the object operated.

Furthermore, insights derived from context can also be helpful in furthering an understanding of past gender roles. For example, in her examination of burial

inclusions at two Sumerian sites, Susan Pollock determined that "hair ribbons, wreath headdresses, 'combs', double lunate earrings and dog-collar necklaces" were interred with women whereas males were buried with "axes, daggers or knives, whetstones, 'brims'...and toilet instruments" (Pollock 1991:373). Unfortunately, in the absence of a body for which sex can be determined, such insights into the relationship between gender and material culture become more difficult. An exception to this, based on the medium from which artifacts were manufactured, was observed by Robert McGhee in a research project involving the Thule (McGhee 1977).

At the Debliquy site, a winter settlement on Bathurst Island, McGhee noted that all of the harpoon heads were made from either ivory or sea mammal bone whereas all of the arrowheads were made from caribou antler (McGhee 1977:142). An examination of five additional site collections, chosen for their size and ability to reflect the spatial and temporal variability of Thule material culture, provided further evidence of the split between the use of ivory/sea mammal bone for harpoon heads and caribou antler for arrowheads. Moreover, it was also indicated that:

> ...ivory was linked symbolically...with a set of mutually associated concepts: sea mammals, women, birds, and winter life on the sea ice. Antler the most useful alternative to ivory in Thule technology, may have been linked with a set of concepts opposed to these: land mammals, particularly the caribou, men and summer life on the land (McGhee 1977:145).

Although McGhee's insights were premised on material culture, his interpretation was greatly facilitated by extant historic and ethnographic evidence. These have also proven useful for other researchers attempting to distinguish

archaeological evidence associated with men and women. For example, several studies have been conducted in an attempt to identify residence patterns on the basis of an understanding that members of a society practiced matrilocal residence and used pottery vessels made by women (Brumbach 1985; Hill 1970; Longacre 1970).

Just as objects exist in space so, too, do they exist in time. Pertinent in this regard is the peculiar situation of skeuomorphs where imagery customarily expressed in one medium re-emergences in a different medium, the circumstances of which potentially may yield meaningful clues (Robb 1998:341-342; von Gernet & Timmins 1987:37):

> One of the most striking examples of a skeuomorph is the…impaled bird motif which has the stem of a pipe thrust through the body of a duck or other bird, so that the mouthpiece protrudes from the bill. Precisely the same idea is replicated in a Gros Ventres (Montana) sacred pipe, in which a wooden carving in the shape of a duck's head replaces an actual bird skin in exactly the same location, and with the stem protruding from the bill (von Gernet & Timmins 1987:37).

In some situations, the direct historical approach permits objects isolated in time, if not in space, to be sequentially linked in a developmental framework and understood from the more complete perspective accorded by historical documents and ethnography (Galloway 1992:181; Johnson 1999:61; Steward 1942:337). For example, in their study of Zapotec ritual and religion, Joyce Marcus and Kent Flannery used documentary evidence authored by 16th and 17th-century Spanish observers of Zapotec culture to predict what archaeological excavation of pre-Columbian sites would uncover (Marcus & Flannery 1994):

> …we might expect to find two-room temples, often oriented to the east-west axis of the sun. Second, we should look for the braziers in which offerings of

> incense (and sometimes human hearts) were burned. Third, we should look for flint or obsidian daggers of the type used in human sacrifice, and for the kinds of smaller tools used in ritual bloodletting – stingray spines, shark teeth, obsidian lancets and so on. Fourth, we should look for the skeletal remains of those animals regarded as appropriate for sacrifice, such as quail, dogs, turkeys, deer and others. Fifth, we should look for the use of ritual drugs such as *Datura*, *Psilocybe*, or even *Nicotiana*, which might appear among the archaeological plant remains. Sixth, we should look for evidence of the 260-day *piye* or ritual calendar. Seventh, we should look for depictions of art of the ancient Zapotec. Finally, we should look for evidence of ancestor worship and the metamorphosis of ancestors into *penigòlazaa* or 'cloud people'. If any or all of these features are present, it may be possible to reconstruct parts of ancient Zapotec religion by use of the Direct Historical Approach (Marcus & Flannery 1994:61).

Although not all of these features were found to exist as a set in the earliest periods studied, some were present and the rest appeared at various stages through the one thousand year period examined and, consistent with the historic accounts, all were found to be in place by the latest era (Marcus & Flannery 1994:61-71). Moreover, the authors found that the general understanding of Zapotec ritual and religion afforded by the historic documents provided insights into the meaning of objects whose existence in the archaeological record had *not* been predicted (Marcus & Flannery 1994:71-72). For instance, offerings discovered in temple foundations were not mentioned in the documents because no Europeans had witnessed their deposition; however, these same records provided sufficient insights into Zapotec culture that they could be interpreted as mechanisms of transforming profane space into sacred space (Marcus & Flannery 1994:71).

The continuity of belief apparent in Marcus' and Flannery's study is all the more remarkable because the Zapotec, like all of the native cultures of the Americas, were subjected to considerable turmoil during the historic period

(Marcus & Flannery 1994:57, 61). The fact that a sequential progression of belief can nevertheless be identified through this chaotic period and over the course of a millennium or more indicates that the effects of culture change, whether they be small or large, are mitigated by cosmology: "Cultures, or rather societies, never confront the unknown, but confront an unknown made known by their preconceptions of such encounters" (Hamell 1987:71; see also Hamell 1983:18; Johnsen & Olsen 1992:428; Schaafsma 2000:7; Trigger 1995:449). An extreme example of this may be found at the 18th-century Parting Ways site in Massachusetts where the entire material culture of the freed slaves who lived there had been forcibly supplanted by that of their former owners yet the manner of its use remained idiosyncratically African (Deetz 1996:197-211). Change occurs, but only within the context of the established cosmology:

> Despite initial government opposition, the practice of Spirit Keeping has persisted in modified and more subtle forms among the Lakotas right into the present day. Speaking through an interpreter in the era of the Vietnam War, R. Clyde McCone asked a Pine Ridge Lakota whether the custom of Spirit Keeping was still active. 'Yes', the Lakota told him, 'we still do that today', and then went on to explain how when a Pine Ridge soldier was to be buried, the American flag was draped over the casket, and how when the casket was lowered into the ground the flag was removed and folded and given (like a soul bundle) to the father or mother or sister of the dead soldier for keeping. A year later, when the anniversary day of the burial came around, a big feast was held. The flag was unfolded, raised, and allowed to flutter open in the sky. The symbolism of soul release can change through the generations into forms that new generations find more meaningful (Hall 1997:31).

Where the extant evidence does not form a temporal continuum – for instance, where there is a gap in time resulting from the disappearance of a culture from the archaeological record prior to the historic period or confusion concerning the ethnic correlation of the archaeological and documentary data –

analogy sometimes provides an acceptable substitute for the direct historical approach. This is premised, once again, on the assumption that humans share basic perceptual and conceptual abilities. Consequently, it is often argued that cultures with similar environments, economies, and/or subsistence strategies are also alike in other ways because the possible responses to these circumstances are limited (von Gernet 1993:72; Wylie 1985:71). Thus, it is considered appropriate to use data pertaining to better known cultures to explain aspects of societies about which relatively little is known. Yet the apposite use of analogy is complicated and, when improperly applied, the results can be gravely misleading. For example:

> For a long time…[the Classic Maya], which flourished in the Mesoamerican lowlands between AD 300 and 900, was interpreted in relation to what social anthropologists knew about the political and religious organization of modern Maya-speaking peasant communities in the highlands of southern Mexico and Guatemala. The result was a picture of peaceful, egalitarian communities, subsisting on swidden agriculture, whose leaders occupied high offices in rotation. It has required much archaeological and epigraphic data to demonstrate the total inappropriateness of this model for understanding Classic Maya society (Trigger 1995:455).

Lewis Binford advocated using analogy exclusively as a source of inspiration for hypotheses that can then be verified (or not) by other means (Binford 1967; see also Hill 1994:87). This attitude is certainly justified insofar as interpretations based solely on analogy do not tend to be very convincing. For instance, it has been argued that small, split, Neolithic Greek figurines of women's legs signify a monetary or marriage pact simply because split objects have sometimes been used in this way elsewhere in the world (Talalay 1987). If cross-cultural correlates were the only criteria by which a hypothesis could be

considered corroborated it could nevertheless be argued that other equally plausible explanations exist; for example, the figurines may have been broken to release their souls. However, as stated earlier, the best explanations are those which are based on as much data as possible from as great a variety of sources as possible (Stahl 1993:246; Trigger 1989:377).

For example, in drawing an analogy between modern central sierra Peruvian potters and their equivalents among the Moche who resided on the north coast of Peru between 100 BC and AD 800, Christopher Donnan presented a much stronger case for his claim that the incised marks found on approximately 10% of plain Moche cooking and storage vessels denote maker's marks: (1) the marks were not intended to be decorative because they are largely unobtrusive and the elements comprising each mark are not arrayed symmetrically as is typical of decorated Moche vessels; (2) only a small percentage of Moche vessels are marked as is the case with the vessels of modern potters who only use marks when the potential exists for them to be confused with the work of other artisans during firing; (3) the marks used by the modern potters closely resemble those of the Moche and, in fact, the modern potters identified the Moche marks as maker's marks; (4) and the word for these marks, *signál*, may be derived from "signar" which is "…a transitive verb meaning to sign or mark with a seal" (Donnan 1971).

Material culture is often associated by scholars with the nebulous concept *style* (Conkey 1990:6; Conkey & Hastorf 1990:2). Simplified, style is the aspect(s) of an object that causes it to be considered *characteristic* of an

archaeological culture(s) of a specific region; for example, North American Northwest Coast split representation on buildings and totems poles, Southwestern U.S. ceramic vessels, and Celtic metalwork (Sackett 1977:370). As such, it is both patterned, correlating with past intent or even unconscious behaviour, *and* a useful tool for the archaeologist (Conkey & Hastorf 1990:2; Sackett 1985:154, 157). Moreover, it is omnipresent in material culture: "Style is pervasive and unavoidable because there is nothing to discuss or be interpreted without assigning or inferring style. Without style we have little or nothing to say" (Conkey & Hastorf 1990:2).

Although some researchers in the past have been inclined to recognize style solely in the decorative attributes of objects it can, in fact, also be found in attributes that would normally be considered purely functional (e.g. the addition of shell temper in some pottery vessels or the polishing of a stone axe) (Sackett 1977:373, 1990:33-34). Therefore, style is *not* simply what remains when all that is functional is removed.

Trends of stylistic analysis have stressed different emphases over the last several decades. For instance, style was initially used to delineate spatial and temporal variation, later it was applied to the problem of identifying social groups (including different levels of such units), and, most recently, it has been applied to the study of past beliefs (Conkey 1990; Sackett 1985:154, 1990:33; Wiessner 1983). None of these are mutually exclusive, suggesting that overly precise definitions, methods, and theory of style may very well be detrimental to its use

(Conkey 1990:15; Conkey & Hastorf 1990: 3). In fact, all of these are worthwhile areas of enquiry as exemplified by the interpretation of the Gundestrup Cauldron.

The Gundestrup Cauldron was discovered in a Danish peat bog in 1891:

> It had been beaten out of a single sheet of silver, and decorated with a series of plates inside and out. A round medallion was fitted in the centre and there were five inner and seven outer panels, on which traces of gilding remained and which were all richly ornamented, soldered on to it...Before the bowl was deposited, however, these plates had been torn off with considerable force and placed inside it. Although a careful search was made, certain parts such as portions of the rim were never found; it is possible that some of the lost pieces had been of gold (Davidson 1993:25).

Stylistic elements were used to date the Cauldron to 80-50 B.C. and offer north-western Gaul as the place of origin (Davidson 1993:25-31). The social context within which it was constructed, and possibly used, was very much Celtic; however, stylistic elements were also identified that are more closely allied with Mediterranean, Near Eastern and Scythian societies (Davidson 1993:27-28). While certainly a puzzle, it is a mystery that would not be known to exist without awareness on the part of the analysts of the stylistic expressions endemic to these culture areas. Specific design elements were also used in the interpretation of the Cauldron as ritualistic paraphernalia illustrating the ancient Irish tale of Táin Bó Cúailnge wherein the culture-hero Cú Chulainn struggles against the Queen of Connacht, Medb, for possession of an extraordinary bull (Davidson 1993:28-29).

Alex Barker has suggested that one way to differentiate between "…a convenient story and a valid interpretation" in such broad space/time syntheses is to examine the applicability of a given interpretation to different expressions of the phenomena under consideration (Barker 2002:44). For example, examining the Southeastern Ceremonial Complex cross-in-circle motif as it occurred on one

artifact in association with a spider and on another with four parrot heads and what is known as a running or endless scroll demonstrated that both support the interpretation of this motif as representing – as was long suspected – the sun or fire (Barker 2002:44). In the first instance, a Cherokee story relates how a water spider crossed an expanse of water to an island where he found sacred fire and placed it in a basket on his back which he spun himself (Barker 2002:44). In the second instance, it was learned that Muskogean-speaking groups burn a sacred fire:

> …at the center of…ceremonial squares during festivities. During one of the traditional dances, participants move in the same pattern made by the running scroll…a square with looped corners. As they dance, four sentries guard the square grounds to prevent them from being profaned. Coincidence? Perhaps. But there's certainly abundant evidence for the identification of woodpeckers with sentinels and warriors, ranging from the use of woodpecker images in place of warrior motifs on certain gorgets to a set of magnificent woodpecker-headed axes found at Spiro mounds in Oklahoma (Barker 2002:44).

In Book VII of *The Republic*, Plato describes an imaginary scene in which men have been chained from birth to the floor of a long, narrow, cave so that they can see nothing but what is directly in front of them. Behind them, however, is a great fire which casts upon the wall the shadows of people and the objects they carry as they proceed along a road that runs in front of the cave. The prisoners amuse themselves by observing the shadows and by listening to the echoes of the people's voices. However, never having seen nor heard anything but shadows and echoes, they do not comprehend that these are mere reflections of reality. When one of the prisoners is released and discovers this, his enlightenment is both

painful and frightening and, initially at least, he does everything in his power to hide from it (Plato 1935:207-209).

Plato, like Lakoff and Johnson, observed a correlation between perception and conception and created this analogy to illustrate the fact that the truths that we hold are relative concepts, entirely dependent upon our ability to perceive, our past experiences and our willingness to learn from new experiences. There are many paths to understanding the meaning of past material culture but true comprehension necessitates a breadth of perception only possible by approaching issues of meaning from as many angles as possible. This means that information must be culled from as many sources relevant to the human past as possible. All material culture is potentially meaningful yet all sources of information are limited in one respect or another and, thus, it is only through their combined use that insights may arise (Brown 1997:467). This is, perhaps, even more true for those scholars whose research takes them furthest into the past. Without the detail accorded by historical documentation, interpretation of meaning becomes extremely difficult.

After all, if an *emotion* such as the disdain exhibited at the A.D. 1150 Anasazi Cowboy Wash site where the inhabitants were cannibalized and the excrement containing proof of this was deposited in a hearth can survive such a lengthy passage of time, the meaning of objects created, used, and disposed within the context of a culture's cosmology should certainly be approachable to at least some degree (White 2003:93).

Standards of Evidence

What are the standards of evidence for demonstrating that an interpretation of meaning in any given instance is *true*? First, it needs to be clearly stated that truth is a relative – and often misleading – concept. In reality, truth is a probabilistic statement, not an assertion of unchangeable fact. Indeed, as has previously been observed, "...we should not expect certainty" (Hill 1994:85). For example, it might reasonably be considered true that all crows are black but it cannot be asserted that such is the case absolutely and without chance of error without assessing each and every crow. Probabilistically, however, there is a high degree of confidence in the statement that all crows are, indeed, black. As observed by the philosopher of science, Karl Popper:

> It should be noticed that a positive decision can only temporarily support the theory, for subsequent negative decisions may always overthrow it. So long as a theory withstands detailed and severe tests and is not superseded by another theory in the course of scientific progress, we may say that it has 'proved its mettle' or that it is 'corroborated' by past experience (1959:33).

Second, there are two ways of approaching scientific understanding: deduction and induction. It has been said that "...a deductive argument is such that if all its premises are true, then its conclusion must be true" (McLeish 1995:188). In practical terms, it involves imposing on the data an expectation and considering it valid if the devised test(s) do not disprove it. It can be an extremely useful tool when the available data and research *foci* are amenable to such treatment but this is not always the case in archaeology. The simple explanation for this is that "...it is impossible to find new information by deduction: [because] all the deductions that can be made are implicit in the

original axioms" (Ibid.). Thus, we arrive at the quandary posed by David Hume in the mid-18th-century: "How do we acquire knowledge of the unobserved"? (Salmon 1966:5).

Induction "...is the method of reasoning by which we move from premises concerning what we have observed to a conclusion concerning what we have not...It is possible for all the premises of an inductive argument to be true and yet its conclusion false" (McLeish 1995:377; see also Popper1959:27; Salmon 1966:4). And, herein lays the basis of many scholars' dissatisfaction with induction – inductive assertions cannot *prove* or, for that matter, *dis*prove anything: "...there are no reliable criteria for deciding between them, or for moving beyond them" (Bell 1994:15). Instead, what they do is create probabilistic arguments. Some statements, based on the evidence, may be highly probable whereas others may be less so.

Third, a highly probable inductive interpretation is marked by corroboration. In archaeology, this may entail correspondences in the attributes and contexts of discrete artifacts and/or features, relevant data from a variety of different sources either within a discipline (e.g. different authors of historic testimony) and/or between disciplines (e.g. evidence from archaeology, history, ethnology, and linguistic). Sometimes, this latter list can be expanded to include other disciplines; for example, biology, as when a characteristic of an animal contributes to an understanding of archaeological evidence relevant to that animal. A highly probable statement, versus a less likely one, is a direct function of the relative amount of available corroborative evidence. The more evidence

that is available, from as great a variety of sources as possible, the more likely that the argument can be considered satisfactorily substantiated.

Contributing to corroborative arguments relating to Iroquoian archaeology is the availability of a range of types of evidence from different disciplines. This is not to assert that this database contains the wherewithal to inform on every topic but the potential exists for evidence to exist relative to a wide variety of subject matter of interest to scholars. It might very well be true that the unavailability of like databases for scholars working in other regions and temporal periods may negatively impact their ability to approach issues of mind and meaning (Hill 1994:88-89; Flannery & Marcus 1996:360-361). Fortunately, this is not the case with Iroquoian archaeology.

Understanding Variability in Iroquoian Material Culture

With roughly ninety percent of Iroquoian site collections consisting of ceramic vessel fragments, it is little wonder that researchers have traditionally focused on this single artifact category for insights into the lives of the people who crafted it. This common practice has been credited further by the fact that Richard S. MacNeish's pottery types (1952), although problematic in many ways, have successfully identified high level social groups within Iroquoia for more than half a century, although the delineation of local level social groups has proven to be

Figure 1: Example of one expression of the faces found on some St. Lawrence Iroquoian vessels. This particular rimsherd was excavated at the Maynard-McKeown site.

more challenging (Wright, J.M. 2006). However, as has become apparent in the years since MacNeish created his typology, otherwise distinct social groups, such as the Iroquoian tribes, often share material culture traits, particularly with respect to ceramic vessels, thus complicating ethnic identification. For example, the faces frequently situated beneath castellations on St. Lawrence Iroquoian vessels can also be found on Oneida pottery, Ontario Iroquois Tradition vessels, and even Munsee (Algonquian) pots (e.g. Finlayson 1998: 1399; Wintemberg 1928:79, 1948:57, 61; Wonderley 2002:27, 40; Wright, J.V. 1969:97, 99): "Both the St. Lawrence Iroquois and elements of the Montagnais Algonquians participated in the same Owasco-Oak Hill related pottery traditions as the eastern Iroquois... As such, pottery cannot be used as an ethnic marker in isolation from other lines of evidence" (Wright, J.V. 2004b:1287).

Furthermore, by excluding other forms of evidence, archaeologists bias their research in favour of just one aspect of culture and one segment of the population. Granted, in a matrilineal and largely matrilocal society, the study of the role of women and their products can be expected to lead to profound insights with respect to clans, the identification of the existence and degree of warfare between communities, and so on. Nevertheless, it is highly probable that important insights can also be gained from the companion study of other aspects of society, including those involving men. Comprehensive site analysis, including both material culture and settlement pattern evidence, is therefore necessary; however, such an approach is admittedly complicated.

This is because, as anyone involved in the intricate enterprise of either cultural or artifactual taxonomy understands, there is a limit to the number of attributes that can profitably be considered at any one time. Too many, and research becomes mired in an untenable morass of unrelated data making it difficult, if not impossible, to extract what is meaningful to a particular research problem from what is not. In 1969, participants in the St. Lawrence Iroquoian Conference, inspired by the advent of computers and their seemingly unlimited data-crunching capabilities, reached this conclusion after failing to establish a comprehensive attribute list for St. Lawrence Iroquoian pottery vessels (Pratt 1980:31-32). This is just as well because, in the more than thirty years that have passed since the Conference, the problem has only been exacerbated by an increased database resulting from more recent excavations. And this is, of course, a situation that will only continue to be compounded in the future. Add to this fact the necessity of considering all aspects of extant material culture and settlement pattern evidence and it is clear that attributes, whether defined narrowly (e.g., an aspect of a pot's appearance) or broadly (e.g., a type of feature), must be selected very thoughtfully in light of the goals of the specific research project to be undertaken.

The Gamble of Life

Whether one is concerned with a past belief system or archaeological explanation, acknowledgement must be made of two qualities that are intrinsic to human understanding: (1) classification, and (2) the requirement for coherence.

All living creatures classify the world around them to a greater or lesser extent, even the simplest amoeba (Lakoff & Johnson 1999:17). But with humans, classification – which is defined as the organization of information into smaller, more manageable (and, therefore, intelligible), units delineated by degree of similarity and difference – extends beyond notions of what is edible versus what is not to encompass received knowledge, experiences, and abstract conceptions. Given the essential proclivity of the human species for coherence, these facts and notions are consequently arranged in such a manner as to produce a reasoned system of what we know (or believe we know) of a particular matter, including the world itself and our role in it (cosmology). All new information and experience is assessed in light of the prevailing understanding and also impacts that understanding, strengthening current perceptions, altering them, or eventually contributing to their abandonment. Ultimately, this instinct to classify and impose coherence is an adaptive trait functionally associated with a desire to influence, if not control outright, destiny:

> In contrast to popular opinion, cosmologies pertain, not just to beliefs involving the scientific understanding of the universe or its metaphysical dimensions such as the supernatural realm and its beings (religion), but to all aspects of humanity's understanding of the universe in which it lives and its role within it. Therefore, our belief systems inform us on such esoteric issues as Creation, the God(s), and the Afterlife (man versus the supernatural); they encapsulate our perceived knowledge of the natural world and provide prescriptions for surviving such potentially dangerous contingencies as hurricanes, earthquakes, and wild animals (man versus nature); they secure our position in society with regard to both our immediate neighbours and those more distant (man versus man); and, when doubt enters the picture, they act as a buttress (man versus himself) (Wright, J.M. 2005:1).

This fateful function of cosmology is ideally exemplified by a constellation of Iroquoian beliefs centred on what these related tribes might have

called The Gamble of Life, a paradigm that embodies a deep-rooted concern with the tenuousness of earthly existence and, specifically, the happenstance of death. To these sedentary horticulturists, the death of an individual did not just constitute the loss of a single person but, rather, a reduction in the vitality of the entire populace. Intra-societal births redressed this to some extent but, when loss of life was too great or there was a perceived need to decrease the strength of enemy populations, extra-societal avenues were utilized including prisoner adoption, prisoner torture-sacrifice, and, more recently, the taking of scalps (Richter 1992:32-33). Adoption permitted the requickening of the souls of the deceased in new bodies, while sacrifice provided another form of population sustenance; for example, through both the notion that consumption of the victim resulted in the transfer of his vitality to the people and the idea that human sacrifice helped to promote crop growth (Judkins 2004:148; Knowles 1940:211; Richter 1992:32-33; Trigger 1985:96-99). Allied with this latter point is the Little Water Ceremony which originally "...involved cutting a magical corn stalk that exudes human blood" (Engelbrecht 2003:38). In fact, it is said that several Iroquoian tribes related stories of a great hunter and warrior who, nevertheless, was killed in war and his scalp taken by the enemy (Curtin & Hewitt 1918:273-274). The process of regenerating him involved experimentation with a medicine that "...caused a stalk of corn to grow out of the ground without sowing seed. In this stalk there was blood. After noting the efficacy of the medicine they broke the stalk, and after obtaining blood from it, caused it to disappear. With this medicine is compounded the seed of the squash" (Ibid.: 274).

Permeating Iroquoian mythology and folklore, historic and ethnographic records indicate that these ideas impacted attitudes toward gender, the division of labour, places, structures, objects, politics, medicine, the cosmos, and cosmogony. Interestingly, a clear structural emphasis on dichotomies is apparent; for instance, in the contrast between men and women, destruction and creation, hunting and horticulture (meat/plant), extra-societal versus intra-societal influence, and the natural (Earth) world (which includes nature-spirits like the Three Sisters) as opposed to the supernatural (Sky) realm and its beings. This latter point is further reflected in one Iroquoian cosmogonic tale which maintains that the earth was created as the direct result of a woman being caused to fall from Sky World by her husband who ruled there (Fenton 1998:35; Hewitt 1928). Hence, the conceptual constellation female/earth/creation is juxtaposed against the conceptual constellation male/Sky World/destruction.

However, of all of the dualities encompassed in the Life as a Gamble paradigm, gender was clearly the most important: "Gendering was…both perceived and engineered, its purpose being to honor Sky wisdom in one of its principle messages to Turtle Island: the perfect balance of the Sky" (Mann 2000:112). The League of the Iroquois itself was organized according to gendered principles and, in historic times and possibly earlier, seating in a longhouse as well as the door by which the longhouse was entered was a matter of gender in association with cardinal direction (Hosbach 1992:90; Shimony 1994: 61; Smith, D.C. 1888:192; Tooker 1978:459). Even astronomical constellations were deemed to have significance with respect to gender:

> The Iroquois take advantage of the mirror image reciprocity between Corona Borealis and the Pleiades to divide the year into a male half represented by the Seven Brothers (Corona Borealis) and a female half represented by the Seven Sisters (the Pleiades). Each is equidistant from the pole and occupies that half of the sky which rises at the beginning of the season devoted to male (summer) and female (winter) activities respectively (Aveni 2001:30).

Metaphorically linking the female physiological capability of giving birth and, thus, sustaining the larger population with souls with the sustenance of the same population through the provision of dietary staples (the so-called "Three Sisters" and "Life Supporters" of corn, beans, and squash), women's power was both creative and natural (Shimony 1994:154-155; Tooker 1984:205; Waugh 1916:3). Moreover, as demonstrated by a system of social organization that involved *Ohwachira* (lineages) and clans derived from an overarching matrilineal system of genealogical descent, it was also timeless – a circumstance that was physically expressed in the matrilocal residence of inter-generational female kin (Beauchamp 1900:85, 88; Fenton, 1998:24; Hewitt 1932:481; Judkins 2004:141 n.5). Thus, women were responsible for the dead members of their society as well as the living and it was their decision whether, and in whom, the soul of a deceased individual was requickened (Beauchamp 1900:87, 91; Hewitt 1932:480; Mann 2000:179).

In contrast, men's potency was destructive as illustrated by their role as warriors, hunters, fishermen, and clearers of land. So, whereas women were responsible for the temporal dimension of their population's existence but were constrained to remain in place to tend both children and crops, men moved freely through the spatial dimension interacting with foreigners to the betterment of their people by conducting trade, creating alliances, and participating in war (Prezzano

1997:90-91; Richter 1992:43; Tremblay 2006:75). This spatial dimension included the supernatural realm with the result that men were believed to have particular capabilities with respect to communication with the spirit-beings of the Sky World, an aptitude assisted by the burning, smoking, and offering of tobacco (Thwaites 1959 10: 159, 165-167; 13: 31, 259-261; 23: 55; Wrong 1939: 171, 189, 198; Mathews 1978: 159).

Presumably this is the reason tobacco was one of only two exceptions to female authority over, and responsibility to, plants. The other was trees which were cleared by men, used by men in the construction of longhouses and palisades (as well as sundry items like bowls and ladles), and functioned as a symbol of male authority at both the community and confederacy levels (Fenton 1998:49, 103). For instance, when a man became a chief, a tree would be planted for him that would continue to grow until his death at which time it would be uprooted (Fenton 1998:103). On a broader scale, at the formation of The League of the Iroquois, the "...great white pine with its four white roots extending to the cardinal directions" was adopted as a suitable metaphor for the authority of the confederacy:

> The tree has long needles...which grow as the confederacy prospers. The white pine (*Pinus strobus* L.) has clusters of exactly five needles, 'one for each nation,' it is said. Peoples attracted by the smoke spy the tree and follow its roots to the trunk. If they accept the principles of the Great Law, they may enter the Longhouse as props to strengthen it. People who hack at the roots suffer dire consequences. The main council bench rests at the foot of the tree. An eagle is perched atop the pine to watch out for the safety of the peace (Fenton 1998:103).

Yet, the heart of these gendered contrasts was metaphorical, not binary. As Vecsey has observed "Opposing forces are also *complementary* forces

throughout the Iroquois cosmology…" (1986:93; see also Perrelli 2009:24; Prezzano 1997:90-91). J.N.B. Hewitt, a renowned 20th-century ethnologist and himself a Tuscarora Iroquois, also noted "...that dualism satisfies 'the need for embodying in the tribal organic unity the principle of the *complementary* sexes as organic factors in order to secure fertility and abundant progeny'" (Hosbach 1992:90). This complementary nature is expressed in two ways: (1) through concepts and corresponding objects that span the dualities (e.g. fire and blood flow) and, (2) the reciprocal entwinement of these concepts and associated material culture. To exemplify the first instance, the word "kettle" (associated with fire) is pervasive in ethnographic and historic documents pertaining to the Iroquoians and, so, it is particularly significant that it was utilized in situations corresponding to both dualities. In addition to references to war-kettles [male] (Thwaites 1959 41:53, 42:171):

> 'Bringing out the kettle' signified a convocation at which food – the source of life, it need hardly be said – was to be shared" [female]...The kettle was also "the object of mediation par excellence between this life and the 'other life'" [male]...The Huron 'Feast of the Dead', a reburial of all the community's deceased every 12-15 years, was actually called 'the kettle' in Huron [female] (Wonderley 2002:39).

An example of reciprocal conceptual entwinement can be discerned in the fact that, when a man traveled away from his community, the clan that he belonged to – which is, itself, determined by principles associated with matrilineal descent – conveyed an obligation to hospitality in like clan dwellings in the communities of what would otherwise be strangers. Meanwhile, women who remained in their own communities were sheltered by longhouses and within palisades built by men. In both cases, the opposing gender provided for the

shelter and security of the other. Ultimately, whether commonalities arise from factors spanning the dualities or entwining them, an overall theme entirely appropriate to a desire to control fate is expressed; namely, balance for the purpose of communal fecundity.

Since the philosophy underlying the Gamble of Life paradigm provided such a powerful stimulus and guide to virtually all Iroquoian activity, it can reasonably be expected that settlement pattern and material culture evidence in the archaeological record will reflect this to a degree limited only by what has been able to survive the passage of time. Furthermore, while the archaeological tradition of viewing Iroquoian material culture from a gendered perspective is well established, at least with respect to certain artifact categories, there are indications that this perspective can be expanded. As Mann has observed: "It was the source of the raw materials, field or forest, that decided the gender of the manufacturer" (2000:228). It is also probable that context of place was significant with respect to the genders and their corollary associations.

Figure 2: One of many gaming disks recovered from the Maynard-McKeown site.

Association	Male	Commonalities	Female
Potency	Destruction	Blood Flow	Creation
		Fire	
		Balance[1]	
Occupational	Hunting[2]	Communal Fertility	Birthing
	Fishing	Enemy Consumption[6]	Enemy Adoption[7]
	Field Clearing[3]	Torture	Horticulture[8]
	Warfare		The Dead
	Enemy Capture/Sacrifice[4]		Food Preparation
	Oration[5]		
	Trade		
	Medicine		
	Grew Tobacco		
Spatial	Forest[9]	Hearth	House
	Trade Routes		Village[10]
			Fields[11]
			Burial Grounds[12]
Fundamental	Supernatural[13]	Contagious Magic[15]	Natural (incl. Nature Spirits)
	Fauna[14]		Flora
Social	Extra-Societal[16]		Intra-Societal
Communal	Village Chief(s)	Game of Bowl[18]	Population[19]
	War Council		Women's Council[20]
	Village Councils[17]		
Structural/	Sweatlodge		Women's House[21]
Settlement Pattern	Deer Pound		Longhouse
	Bear Enclosure		
Celestial	Sun[22]	Pleiades Zenith[24]	Moon[25]
	Corona Borealis[23]		Pleiades[26]

Cardinal	East-West[27]		North-South[28]
Material Culture	Smoking Pipes[29]	Gyneco-Android Pipes[30]	Pottery Vessels
	Weapons	Gaming Disks	Food Preparation Tools
	Fishing Implements		
	Hunting Charms		
	Medicine Bundles		
	Stonework		

Table 1: Sustaining the Kettle. References to the above are as follows: 1. Herrick 1995:15; 2. Judkins 2004:149; 3. Goldenweiser 1915:376; Judkins 2004:143; Mann 2000:219; Shafer 1941; 4. Knowles 1940:187; 5. Richter 1992:47; 6. Trigger 1985:96-97; 7. Hewitt 1932:480; 8. Goldenweiser 1915:376; 9. Prezzano 1997:91; 10. Hewitt 1932:480; Prezzano 1997:90-91; Richter 1992:43; 11. Prezzano 1997:90-91; 12. Hewitt 1932:480; 13. Knowles 1940:153; 14. This is reflected in the gift of meat from the groom's family to that of the bridge and, correspondingly, the offering of bread (corn) from the bride's family to the groom's. Shafer 1941; 15. Herrick 1995:37; 16. Prezzano 1997:91; 17. Fenton & Moore 1974 I:295; Richter 1992:43-44; 18. Ceci 1978; 19. Galloway 1997:51; Prezzano 1997:90-91; Richter 1992:20; 20. Fenton & Moore 1974:295; Richter 1992:43; Thwaites 1959 54:281; 21. Galloway 1997:56-57; 22. Mann 2000:436; Thwaites 1959 13:59-79; Trigger 1985:97; 23. Mann 2000:110; 24. Ceci 1978; 25. Mann 2000:436; Shimony 1961:137; 26. Mann 2000:110; 27. Mann 2000:347; 28. Mann 2000:347; 29. Wonderley 2005:215; 30. Hosbach 1992.

St. Lawrence Iroquoians

Flowing from the Atlantic coast to the interior of North America from whence other river systems can be accessed for yet further travel inland, the St. Lawrence River constitutes a confluence of more than just fresh and salt water (Hallowell 2004:561-562). Now, as in the past, this largest estuary in the world functions as a vital subsistence resource, vehicle for travel, and cultural interaction sphere (Wright, J.V. 2004a:321-393, 2004b:1288). Unsurprisingly, numerous native groups recognized the significance of this region and utilized it for thousands of years prior to the arrival of Europeans and the further development of the Seaway. Yet, while many native groups made use of some portion of the River on a year-round or seasonal basis, only the St. Lawrence Iroquoians are noted for settling a considerable stretch of the waterway; specifically, nearly five hundred kilometres from the Québec City region to the east end of Lake Ontario with additional communities situated near tributaries such as the Richelieu, St. Maurice, South Nation, and Black rivers as well as at the north end of Lake Champlain (Blais 1993; Jamieson 1990:396; Pendergast 1985:26, 1990a:20, 1991:52; Wright, J.V. 2004b: 1236, 1242; Petersen et al. 2004). In all probability, the apparent spatial clustering of these sites corresponds to tribal distinctions that suggest that the St. Lawrence Iroquoians may have been a confederacy much like that of the Wendat or the League of the Iroquois (Chapdelaine 1990).

The only existing historic records concerning the St. Lawrence Iroquoians are those associated with the voyages of Jacques Cartier (1534, 1535, 1541) and

Jean-François de la Rocque, Sieur de Roberval (1542-1543) (Hallowell 2004:118, 546). While sadly incomplete and ethnocentric, they nevertheless provide several important insights into the lives of a people who were to disappear as a distinct social entity by the time of Samuel de Champlain's voyage to the same region early the following century: "…their presence remaining only in the oral traditions of the remaining Native peoples in the region, their villages reportedly nothing more than grassy fields" (Hallowell 2004:184; Jamieson 1990:385). Just how it was that a populace estimated to have numbered ten thousand at the time of initial contact with Europeans could vanish in less than a century remains a mystery to scholars to this day (Wright, J.V. 2004b:1238-1239).

Encountering a group of approximately two hundred St. Lawrence Iroquoians in the Baie de Gaspé where they had journeyed to fish *agedoneta* (mackerel) in the summer of 1534, Jacques Cartier abducted the chief's two sons to train as interpreters over the course of the winter with promises of their return the following year (Cook 1993:25, 27, 33). True to his word, they disembarked at Chief Donnacona's village of Stadacona near present-day Québec City the subsequent September at which time Taignoagny and Dom Agaya declined to accompany Cartier farther upriver explaining that their people were not on good terms with those to the west (Cook 1993:51, 53). Without guides or translators, therefore – and in spite of Donnacona's warning that bad things would happen if he traveled in that direction – Cartier departed for the village of Hochelaga of which he had heard so much. En route, he encountered natives who were unsurprised by his appearance, supporting evidence that Europeans had, in fact,

plied the waters of the St. Lawrence before 1534 (Cook 1993:xxi, 58; Pendergast & Trigger 1972:114; Richter 1992:51; Trigger 1978:346). Furthermore, apropos Donnacona's assertion of hostilities in the area, all of the settlements he encountered between Stadacona and Hochelaga were situated on the north side of the river suggesting that the southern shore may have been a no-man's-land buffer-zone (Trigger & Pendergast 1978:357; Wright, J.V. 2004b:1236, 1282). At Hochelaga, Cartier and his men were greeted warmly by more than a thousand people (Cook 1993:59). Unlike the residents of Stadacona, however, Cartier found that Hochelaga's inhabitants subsisted primarily on corn rather than fish, consequently led a more settled lifestyle, and strongly defended their village, once more reinforcing the understanding that this was a dangerous region (Cook 1993:61-63): "There is only one gate and entrance to this village, and that can be barred up. Over this gate and in many places about the enclosure are...galleries with ladders for mounting to them, which galleries are provided with rocks and stones for the defence and protection of the place" (Cook 1993:61).

Prior to the reassessment of linguistic evidence collected during Cartier's travels, scholars attributed pre-Contact period Iroquoian settlements at Montréal and elsewhere along the St. Lawrence River to virtually every known Iroquoian tribe or confederacy but with particular emphasis on the Wendat (or Ouendat, known as Huron by the 17th-century French and later called Wyandot) and eastern Iroquois tribes (Onondaga, Oneida, and Mohawk) (MacNeish 1952: 56-57, 71, 73; Pendergast 1997-1998; Pendergast & Trigger 1972:93; Trigger & Pendergast 1978:359; Wintemberg 1936:121; Wright, J.V. 1972:86, 2004b:1236).

Since the 1960s, however, it has been acknowledged that both linguistically and archaeologically they are the product of a distinct Iroquoian tribe, or more likely several related tribes, that have collectively come to be referred to as St. Lawrence Iroquoians (or, less often because of the potential for confusion with the unrelated Laurentian Tradition, as Laurentians) (Chapdelaine 2004:67, 1993:87; Lounsbury 1961, 1978; Pratt 1991:44; Pendergast 1991:51, 55; Pendergast & Trigger 1972:70; Trigger & Pendergast 1978:357, 359-360; Wright, J.V. 1987:55, 2004b:1235, 1240). Furthermore, it was around this same time that it became understood that the eastern Iroquois tribes (the Onondaga, Oneida, and the Mohawk) developed *in situ* (Tuck 1971): "That, in turn, has suggested that Jefferson County [and other regions inhabited by the St. Lawrence Iroquoians] also must have its own history" (Wonderley 2005:217).

Archaeologically, these settlements conform to a general Iroquoian pattern that once extended across much of what is now the Lower Great Lakes and associated St. Lawrence River lowlands of Ontario, Québec, New York and Pennsylvania and included the Wenro, the confederacies of the Wendat, Tionnontaté (called Petun by the 17th-century French), Neutrals and Eries, the related tribes of the St. Lawrence Iroquoians, the Susquehannock, and the tribes of the League of Five Nations (the Onondaga, Oneida, Mohawk, Seneca, and Cayuga) which later became the League of Six Nations with the adoption of the Tuscarora. All of these groups are considered to be typically Iroquoian because, except for seasonal procurement sites, they resided in large settlements of multi-family longhouses that were usually surrounded by defensive-works such as

palisades and trenches but which had to be relocated every number of years due to soil exhaustion; practiced horticulture (notably the Three Sisters of corn, beans, and squash) supplemented by hunting, fishing, and the gathering of wild plants for food and medicine; smoked tobacco, frequently fashioning pipes in ways that were ideologically significant; were accomplished ceramicists with the products of their efforts often accounting for upwards of ninety percent of the material culture derived from their former habitation sites; domesticated only dogs to which they accorded cosmological importance often connected with feasting; and placed their dead in bundle burials, at times possibly in association with ossuaries (Smith, D.G. 1990; Snow 1998:393-395; Tuck 1978; Wright, J.V. 1972:67). It is also probable that Iroquoian tribes prior to European contact, no less than their post-contact descendants, perceived genealogical descent as matrilineal, customarily practiced matrilocal residence, and accorded their children membership in one of several totemic clans associated with a moiety, or perhaps a phratry, at birth (Snow 1998:393-395). Furthermore, there is evidence that warfare was an integral, metaphysically-based, facet of Iroquoian society (Tuck 1978:330).

Figure 3: Maynard-McKeown rimsherd illustrating one expression of the faces typical of St. Lawrence Iroquoian pottery decoration.

St. Lawrence Iroquoian material culture in particular is characterized by the following traits:

(1) superior construction of ceramic vessels endowed with diverse combinations of chevrons, horizontal lines, hollow-reed punctates, finger-nail

impressions, lip decoration, handles, well-defined collars and punctate faces (generally situated beneath castellations). Frequent associations of these attributes include what are referred to as Corn-ear and Ladder-plait motifs;

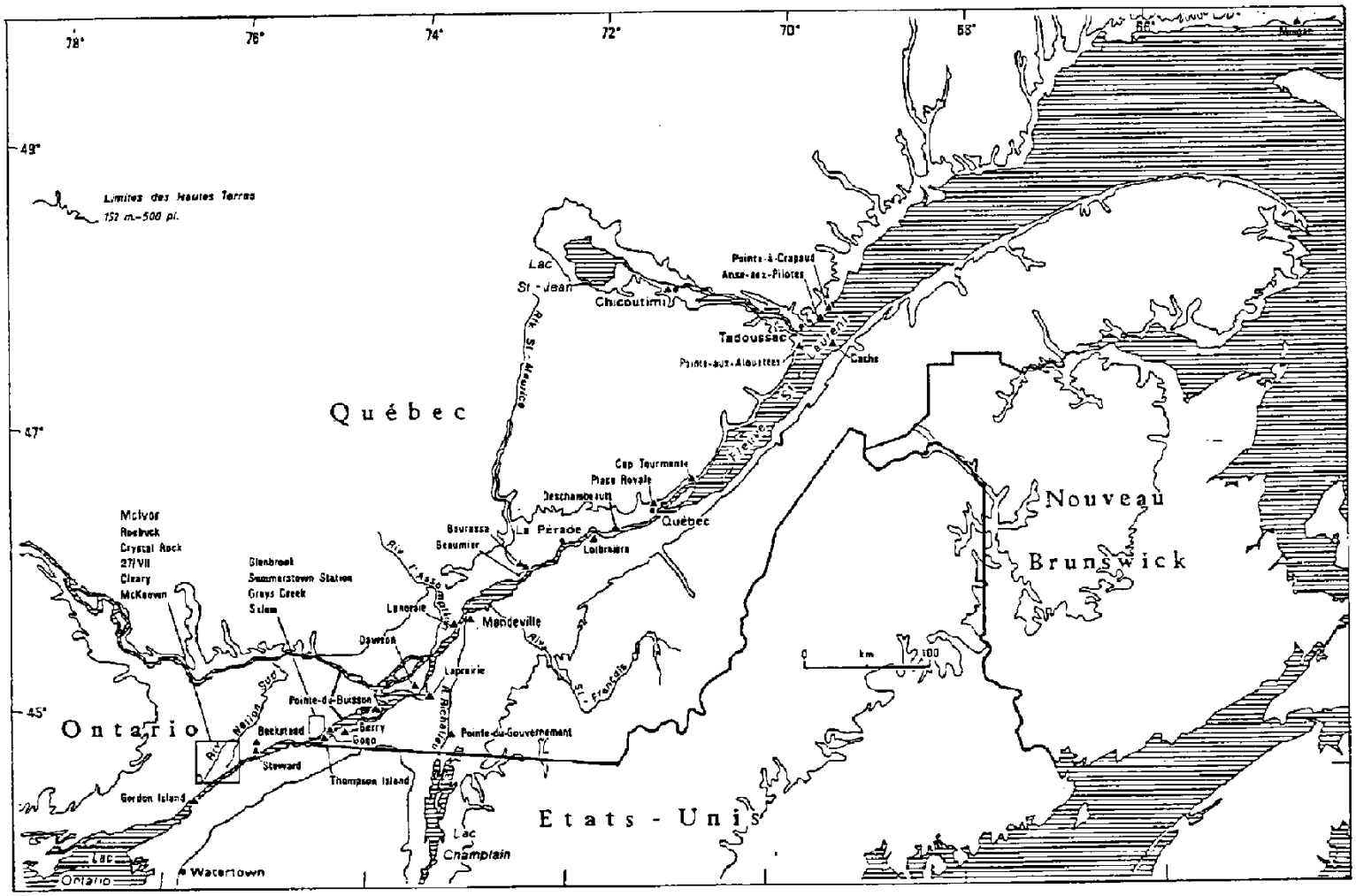
Figure 4: Effigy pipe without a stem from the Glenbrook site.

(2) Roebuck Human Face, Escutcheon (Moon), and Janus effigy pipes, smoking pipes constructed from deer scapulae, and a higher proportion of vasiform and trumpet pipes than are typically found on other Iroquoian sites. Claude Chapdelaine has also suggested that the bowl with no stem "…may well be considered a distinct type, and its development might be the middle St. Lawrence valley with the oldest specimen coming from the [mid 14th-century] Lanoraie Site…"; (3) higher proportions of gaming disks and discoidal clay beads (pottery and soapstone) than at other Iroquoian settlements; (4) a well developed bone and antler industry, particularly with respect to the occurrence of awls, netting needles, knives, hoes, spatulas, conical and bilaterally barbed arrowheads and modified deer phalanges with those of the toggle type being found in greater relative quantities than the cup-and-pin variety. Human skull gorgets, which possibly functioned as rattles, are characteristic of St. Lawrence Iroquoian sites although they do not occur in great quantities. Beaver incisor knives are frequent occurrences whereas bear canine knives are less commonly found, although no less distinctive of St. Lawrence Iroquoian sites; (5) a relatively undeveloped lithic industry with respect to other native groups, including other Iroquoians. Projectile points and scrapers are rarely found although red slate was

used to make a variety of objects and stone discs and beads were often formed from mudstone and steatite. Quartz crystals and red ochre are found on many sites (Chapdelaine 1992:32, 36; Jamieson 1990:389, 392-394; Pendergast 1966:81, 1981:57-72, 1985:26, 29, 34, 1991:59, 1992:54-55, 1996:55; Wright, J.V. 1979:71, 73, 2004a: 328, 2004b:1238, 1243-1244, 1248, 1277-1278).

Although the last few decades have seen a resurgence of scholarly interest in the St. Lawrence Iroquoians, it is still a relatively new area of enquiry as exemplified by the fact that they were not even recognized as a distinct people until the 1960s.

Figure 5: Modified deer phalange of the toggle type.



Map 1: St. Lawrence Iroquoian archaeological sites (Chapdelaine 1989).

The Maynard-McKeown Site

The Maynard-McKeown site is an early 16th-century St. Lawrence Iroquoian village situated near present-day Prescott, Ontario. In 1987, under the overall direction of James F. Pendergast and the field direction of Dawn M. Wright, approximately one quarter of the twice or thrice expanded 1.6 hectare village was excavated exposing all or portions of twenty-three longhouses, palisades, a defensive ditch, two possible sweatlodges, and numerous other features of social significance (but, unfortunately, no middens) (Pendergast 1988, 1990b; Wright, J.V. & Wright, D.M. 1990; Wright, J.V. 2004b:1260). This is exceptional because, while it seems that there was a strong St. Lawrence Iroquoian presence between, approximately, the 14th and 16th-centuries in eastern Ontario, southern Québec, northern New York, and possibly portions of Vermont and Maine, none of the archaeological work completed to date offers anywhere near the same quantity and quality of settlement pattern evidence (Petersen 1990; Wright, J.V. 2004b:1296).

Figure 6: William J. Wintemberg examining Roebuck site artifacts.

For instance, when he excavated the nearby Roebuck site in 1912 and 1915, the outstanding scholarship of a man who could justly be called the father of St. Lawrence Iroquoian archaeology, William J. Wintemberg, did not extend to

the recognition of the post moulds that are all that remain of individual house structures even though he was aware of their significance with respect to the demarcation of the palisade (Pendergast 1990a:18; Wintemberg 1936:1, 10-11). Likewise, Wintemberg's latter-day successor and instigator of a renewed interest in the St. Lawrence Iroquoians after a lull of many decades, James F. Pendergast, tended to overlook settlement pattern detail at many of his early excavations because his focus was primarily on the avowedly superior ceramics fashioned by the St. Lawrence Iroquoians and artifact-rich middens produced sufficient quantities to meet his research requirements at that time (Pendergast 1990a:18).

Figure 7: Jim Pendergast and his wife Margaret at the Maynard-McKeown site opening ceremonies.

With settlement pattern evidence from yet other sites compromised by contrary geophysical conditions (e.g. soils and tree roots), the destructive activities of looters and quarrying, or – in the case of New York where relatively little research effort has been expended on this group of related peoples – simply ignored (Clermont & Gagné 2004:80; Pendergast 1993:20; Wonderley 2005:233; Wright, J.V. 2004b:1235, 1260, 1292), only a handful of excavated St. Lawrence Iroquoian sites exist for which the resultant material culture can be studied from the perspective of its association with specific cultural features (e.g. McIvor, Steward, Beckstead, Lanoraie, Masson, and Mandeville) (Wright, J.V. 2004b:1260). Of these, the Maynard-McKeown site is the largest undertaken to date. Moreover,

and atypically of most archaeological excavation, twenty-seven tonnes of fill from over one thousand features from the site was retained for later flotation thereby permitting a much more refined level of analysis than is customarily possible (Wright, J.V. & Wright, D.M. 1990, 1993). Of several important revelations already derived from this circumstance one stands out; namely, the discovery of the only extant evidence of European contact with any St. Lawrence Iroquoian group, a find which almost certainly reflects "…trade with European fishermen in the Gulf of St. Lawrence sometime in the first half of the 16th century" (Wright, J.V. 2004b:1281, 1304; Wright, J.V. & Wright, D.M. 1990:4). For these reasons, the analysis of the settlement and material culture data resulting from the excavation of the Maynard-McKeown site holds an unmatched potential to contribute significantly to our understanding of the life ways of the St. Lawrence Iroquoians.

Sustaining the Kettle

The selected areas of investigation encompass a range of potentially informative issues of social and cosmological significance. Social structure is the focus of one in which an attempt will be made to identify longhouses associated with particular clans; two types of special purpose structures will constitute another; an additional area will involve an endeavour to examine the hypothesized gendered use of space with respect to ritual features; and yet another area will constitute a foray into the complexities of interpreting abstract and iconographic art:

(i) Intra-site clan longhouses – Sound archaeological, ethnological, and historical evidence indicates that: (a) Iroquoian society was both matrilineal and clan-based and, consequently, children assumed their mother's clan at birth; (b) residence was commonly matrilocal so that multi-family longhouses were the domiciles of individual clans and, on the basis of Iroquoian settlement patterns at many archaeological sites, it would seem that large clan segments inhabiting several such dwellings tended to cluster together; (c) pottery vessels were crafted by women; (d) even in situations of forced adoption into a foreign tribe, Iroquoian women gave their creations the same attributes that they had used formerly as demonstrated by trace element analysis; and, (e) the decorative motifs, the techniques by which they were applied, and the vessel shapes with which women chose to craft their pots signify high-level social groups (Engelbrecht 2003; MacNeish 1952; Trigger et al. 1980; Wrong 1939).

If there are vessel attributes or unique vessel attribute combinations that also signify lower level social groups, it is hypothesized that it will be possible to identify clan residences (discrete longhouse structures, possibly clustered with other clan dwellings) within the Maynard-McKeown village. The implications of this include, not just an improved understanding of local level social phenomena, but the elucidation of the potentially heterogeneous nature of Iroquoian sites and, therefore, the incomparability of such sites at the settlement level.

(ii) Sweatlodges and woman's house – Historic and ethnographic records indicate the past use of structures of purification by Iroquoian men. Referred to as "sweatbaths" or "sweatlodges", these were small, temporary, buildings in

which men would crowd themselves around a small fire, smoke tobacco, and sweat for the purposes of physical and mental purification (Tyyska 1972; Wrong 1939:197). Evidence suggests a supernatural facet in the smoking of tobacco and in specific references to using the sweatbath in order to commune with the spirit realm. References to sweating in the historic documents frequently coincide with statements of forthcoming battle. For instance:

Figure 8: The circular structure visible in the upper left corner of this photograph is hypothesized to have been one of two sweatlodges at the Maynard-McKeown site.

> Purificatory rites were usually required both before and after war, and there were many strict prohibitions while actually on the war-path. Sexual continence on the part of the warriors might be demanded during the entire period of hostilities…success in war meant the satisfaction of supernatural compulsives… (Knowles 1940:153).

Most, if not all, early accounts concerning Iroquoian society were authored by men with the result that issues of import to women went largely unrecorded. Nevertheless, exceptions to this suggest the possibility that female purification structures may also have been utilized. These references can generally be categorized as: (a) pertaining to restrictions regarding the handling of food by menstruating women; (b) the affect of their presence in dwellings with men and sacred objects (medicine) and, most particularly, with respect to men's success in war and the hunt; and (c) their need for isolation (including hearsay evidence of

the use of isolation huts in the distant past) (Herrick 1995:37; Shimony 1961:159, 216-217; Thwaites 1959 9:123, 308-309, 13:261, 15:181; Tooker 1991:122 n. 21; Wrong 1939:67). Galloway has stated that "…studies appear to agree that menstrual seclusion and its accompanying practices are advantageous to women and are characteristic of societies where husbands and males in general are not particularly dominant, especially matrilineal societies where residence rules are generally matrilocal" (1997:50). The fact that a pregnant woman's presence was desirable in instances involving the healing of a man injured in battle and all women were identified with horticultural abundance strongly suggests that men, the hunters and warriors, were associated with destruction and the supernatural (e.g., sweatbaths, tobacco) while women, the bearers of children and custodians of crops, were linked with creation and the natural world.

Two sweatbaths have tentatively been identified at the Maynard-McKeown site and, given the extant literature available, it is expected that their circular shape, combined with the presence of fire-cracked rock, will effectively test these identifications. Despite lore that female purification structures were located outside of settlements, it is expected that in times of war – such as that so clearly experienced by the St. Lawrence Iroquoians in the years leading up to their eradication as a distinct culture – these structures would have been incorporated into the village itself. Evidence of the existence of such a structure will be construed from: its comparatively small size with relation to other longhouses, an unobtrusive locale at the village margins, relatively few features, pottery that is either unique or a random representation of styles from longhouses located

throughout the village, a dearth of stone, and possibly – given that Iroquoians are known to have practiced sympathetic magic – an absence of animal bones procured by hunting.

(iii) Male versus female ritual features – It is hypothesized that spaces within a village, like the materials from which objects were constructed, were significant with respect to gender. If this is true, then ritual features identified as male or female on the basis of the dichotomies listed in Table 1 from ethnographic and historic evidence should occur in particular areas. Specifically, it is proposed that female ritual features will entail space within longhouses while male ritual features will be located in the spaces between houses. Suggestive support for this argument may be found in the fact that, while prisoners were tortured inside houses, their ultimate destruction occurred outside (Wrong 1939:162). Two examples of features that will be examined in light of this hypothesis include one containing a mass of deer bones and another of nested vessels.

The suspected male feature involved "…a number of paired deer humeri with holes burned and punched through their proximal ends" (Wright, J.V. 2004b:1276), decorated with small circles of red ochre, and packed in a tight bundle as though originally contained within a bag or basket which has long since disintegrated (personal observation). Interestingly, the only other recognized instance of this occurred at the Uren site (Wright, M.J. 1986:61). The fact that the Uren site is a 13th-century Ontario Iroquois Tradition site, located some distance west of the west end of Lake Ontario, whereas Maynard-McKeown is a 16th-century St. Lawrence Iroquoian site, situated east of the east end of Lake Ontario,

indicates that this feature reflected a widespread and persistent belief.

The suspected female ritual feature included two nested ceramic vessels, one of which was apparently created to give the impression that it was Wendat:

> The body of this Huron-like vessel is seldom more than three or four millimetres thick and it is very friable. Unlike the large St. Lawrence Iroquoian vessel, which was a wholly serviceable cooking pot, the Huron-like small vessel is quite unserviceable. Indeed, this vessel gives the impression of it's (sic) having been made for the specific purpose of being fitted into the large St. Lawrence vessel. The impression is reinforced by the close tolerances by which the small pot is able to pass through the throat of the St. Lawrence vessel (Pendergast 1988:17).

Pendergast speculated that this feature was ritualistic, reflecting the aggressive relationship between the St. Lawrence Iroquoians and the Wendat, and symbolized the "ingestion" by the St. Lawrence Iroquoians of their enemies.

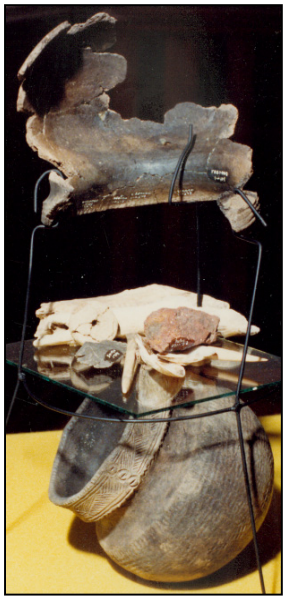


Figure 9: A museum display of one of the Maynard-McKeown double-pot burials and associated items showing how they were buried at the site.

Other unique features were also excavated at the Maynard-McKeown site and, after consultation with the field notes, these will be incorporated into this phase of the proposed study as well. The dualities listed in Table 1 are expected to be particularly useful in determining what will constitute a ritual feature. For the purposes of this aspect of the study, it is suggested that material culture or settlement pattern evidence conforming to at least two of the listed dichotomies will be appropriate. For example, the above-noted deer feature contains the bones of an animal that was hunted (male) and was contained in a feature located

between houses which it is hypothesized is where male ritual features will be found. In contrast, the nested vessels were created by women and excavated from an intra-house feature.

(iv) Male versus female abstract and iconographic imagery – Although Iroquoian men and women both made use of the same abstract geometric decorative attributes in their decoration of ceramic vessels and pipes, little attention has traditionally been paid to whether the attributes were combined together in such a way as to create the same motifs. Consequently, it is proposed that the motifs on vessels and pipes from the Maynard-McKeown site be examined as a means of ascertaining: (1) if gender differentiation exists, and (2), if so, whether all motifs, or only some, are significant in this respect. Furthermore, since these abstract attributes often appear in association with such iconographic imagery as that found on effigy pipes and beneath castellations on vessels it may be that any differentiation that can be identified in the first instance will assist in the interpretation of this type of imagery as well. Thereafter, it will be necessary to resort to extant ethnographic and historic evidence for clues to the interpretation of these iconographic images although, as with the previously described areas of enquiry, it is hypothesized that the Gamble of Life paradigm will act as a useful guiding principle.

For example, utilizing ethnographic and historic evidence, Anthony Wonderley has presented a compelling argument for the association of the faces, and sometimes bodies, that appear beneath ceramic vessel castellations and a mythical race of horticultural spirit-beings who were forebears of the Corn Husk

Society (Wonderley 2002:39-40). Apropos the current proposal, this association provides additional support for the female–horticultural sustenance–society sustenance correspondence described herein. Furthermore, given extant ethnographic lore that describes these beings as "covered over by corn tassels or cornhusks" (Fenton quoted in Wonderley 2002:40) and at least one historic reference to the creation of "straw men" from cornhusks (Thwaites 1959 13:261-267), it would seem that this material is also linked with these concepts.

> Diminutive beings personifying plant fertility, cornhusk people are an industrious agricultural people 'associated with planting and cultivating of prodigious food crops'...They are especially concerned with growing corn and it is cooked corn food which they crave (generally cornbread and unroasted corn mush). Cornhusk people are regarded as messengers of the Three Sisters who prophecy – quickly, because they must return home to tend crying babies – bountiful crops and many children...Their leadership is dominated by women, and the cornhusk folk are strongly linked to women (Wonderley 2002:40).

Undoubtedly the most potentially problematic subject of study in the proposed thesis, this phase will consist of three steps: (1) the recording and treatment of the same sort of data already collected from vessels for the clan longhouse investigation for pipes, with the substitution of pipe shape (e.g. trumpet, conical) for vessel profile, and the subsequent comparison of the abstract geometric attributes on vessels and pipes. While providing a clearer picture of the possibility of the gendered use of certain attributes or attribute combinations, this will also permit an evaluation of the statement that "…patterns of community or group exogamy ought to be reflected in the stylistic homogeneity of artifacts associated with the one sex and the heterogeneity of those associated with the other" (Trigger 1981:3); (2) the observation of the use of these same attributes in

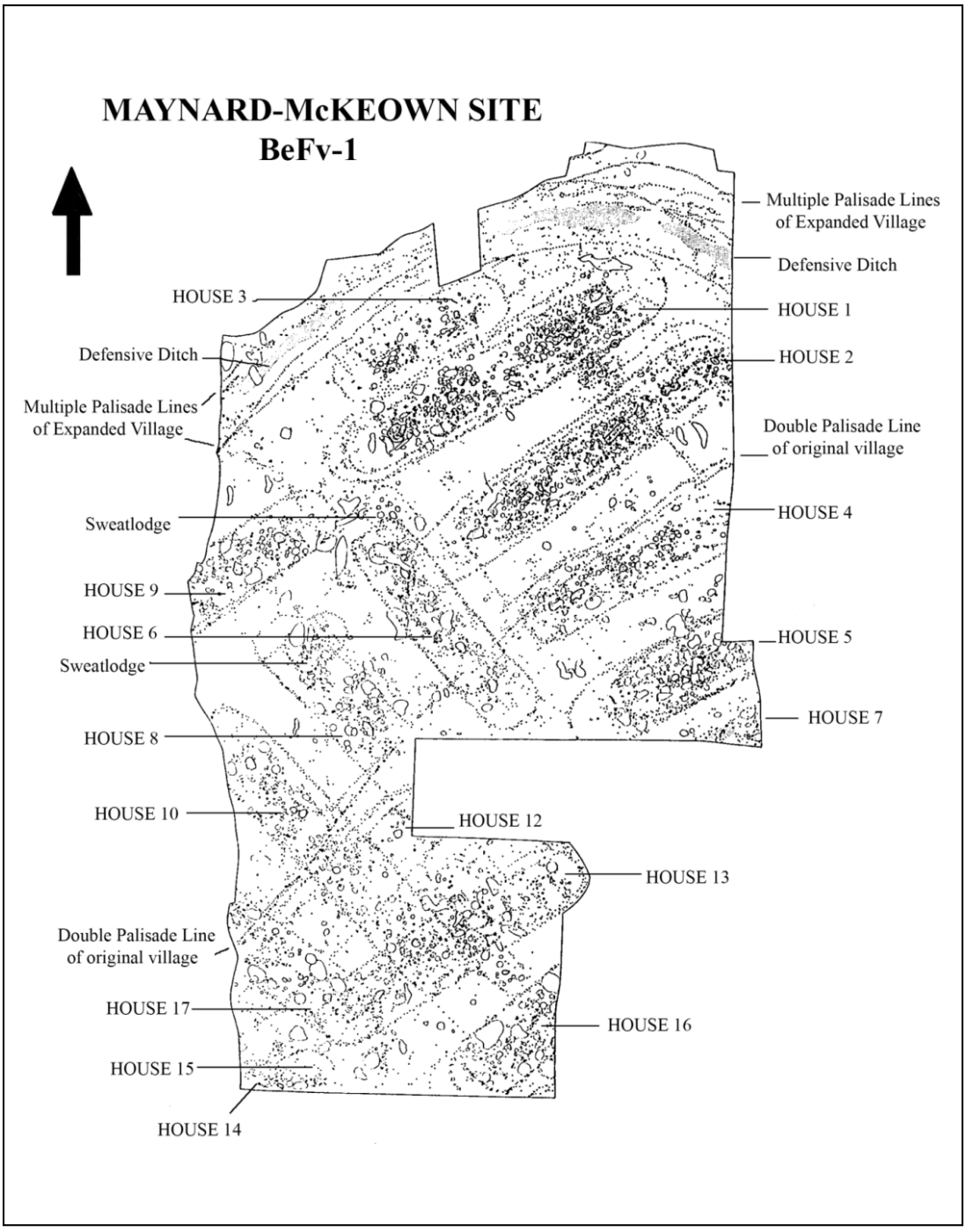
association with iconographic imagery, such as that found in the “faces” located on ceramic vessels beneath castellations and in effigy smoking pipes, for evidence of their gendered utilization; and (3) the close examination of the iconographic imagery for clues to its interpretation by means of extant historic and ethnographic literature.

CHAPTER TWO: METHODS PAST AND PRESENT

Site Excavation and Recording Procedures

As is the case with many St. Lawrence Iroquoian sites, the Maynard-McKeown site is situated near a swamp with all of the associated resources it would have offered and at a distance from the St. Lawrence River (ca. 4 km). A branch of the South Nation River, however, is located less than a kilometre away. The site itself is located on two properties in Augusta Township, Grenville County, Lot II, Concessions 2 and 3. As such, it is near the hamlet of Maynard, close to the larger community of Prescott, Ontario, and across the St. Lawrence River from Ogdensburg, New York. Most of the village is on the Concession 2 property but a small portion overlaps Concession 3; however, as will be discussed in Chapter Three, there is compelling evidence of other cultural features on the Concession 3 property that were unrecognized during the site's excavation in the summer of 1987.

Figure 10: Aerial view of a portion of the Maynard-McKeown site excavation. The bobcat in the centre provides spatial perspective.



Map 2: Maynard-McKeown site map of settlement features excavated in 1987.

The first published reference to the settlement appeared in Wintemberg's Roebuck site report where he noted that a site of the same culture was located on the Simpson farm at Maynard (1936:121). Careful study of Wintemberg's archived notes, however, indicates that he was aware of its existence as early as 1912 and visited the site in 1914 (Canadian Museum of Civilization Archival Document Box 52, File 4). Nevertheless, as Pendergast noted, farmers would have known about the site's presence long before this; indeed, Wintemberg recorded that the Concession 3 property had been farmed for over one hundred years as of the summer 1914 (Pendergast 1988:12; Canadian Museum of Civilization Archival Document Box 126, File 2, Wintemberg).

Figure 11: Excavated trench with evidence of two defensive ditches.

Between May 18th and September 18th, 1987, approximately 6,000 square metres of the twice or thrice expanded 1.6 hectare village on Concession 2 were excavated under the field direction of Dawn M. Wright. First, the field was walked twice and the few artifacts that were apparent on the surface were collected. Second, the bulk of the plough zone was removed with the assistance of heavy machinery leaving a more manageable veneer to be shovel-shined by the excavators, thereby revealing the underlying village features. There was one primary area of concentrated excavation activity, another smaller area close to the

woodlot, and several approximately two and a half metre wide strips intended to delineate the boundaries of the settlement. Evidence was found in each of these strips of one or two defensive ditches; thus, the hexagonal shape apparent in Figure 13 illustrates the full extent of the village of which perhaps slightly more than a quarter was excavated.

Within the area of excavation, four complete longhouses, portions of seventeen longhouses, two complete sweatlodges, two separate sets of palisades, and defensive ditches were exposed. Some of the houses, like Houses 1 and 2, were dense with interior features while others were considerably less so. In the course of one or both of the village expansions, several houses were torn down and built over with the result that there are many house overlaps apparent in the archaeological record. Strangely, despite looking for them, no middens were found. The provenience of features was triangulated within a grid of five-metre squares before being measured, profiled, drawn in plan and profile view, and dug. The location of post-moulds was also triangulated and some were profiled. Hearths were not excavated except by one over-enthusiastic volunteer.

Figure 12: A palisade cross-cut the excavated portion of the site and indicates that the village was expanded at least once to accommodate a larger population.

Feature, postmould, and catalogue data was recorded on forms provided by the London Museum of Archaeology utilizing a system created by that institution. Feature and postmould data was regularly sent to the University of Western Ontario for computer entry. Maps were generated and returned for corrections. Most of the material culture excavated at the site was catalogued in an on-site laboratory by the author and Gretchen Keenan. Artifacts were catalogued according to house, house overlap, palisade, defensive trench, or areas between houses. Thus, a catalogue number beginning "02" denotes House 2. Different numbers were given to house overlaps so that, for example, artifacts from the area intersected by Houses 10 and 12 begin with "33".

Dating of the site was premised upon two factors: (1) the presence of an iron awl places the occupation of the site within the Contact Period; and (2) Pendergast's work with radiocarbon dates acquired during excavation which caused him to conclude that: "...the general impression of the calibrated dates suggests that the McKeown village was occupied circa A.D. 1500, possibly a little earlier (circa A.D. 1475)" (Pendergast 1993:10).

Figure 13: Aerial photograph of the 1987 Maynard-McKeown excavation.

Pit Fill Flotation

In 1968, Stuart Struever initiated a revolution within the discipline of archaeology when an article he wrote describing an apparently innovative method whereby even the smallest of bones, plant remains, and artifacts could be recovered from their archaeological contexts was published in *American Antiquity* (Struever 1968; Watson 1976:79). Although flotation had been used in industry

for some time and was well known to botanists like Volney Jones and Hugh Cutler, the method was utterly new to most North American archaeologists (Struever 1968:353; Watson 1976:78). Almost immediately upon publication of Struever's article, however, its potential was recognized and ever since researchers have striven to improve and adapt it to a wide variety of field conditions. Among the first to become involved in these efforts were Ontario archaeologists who, beginning with William D. Finlayson's excavation of the Thede site in 1969 and J.V. Wright's excavation of the Nodwell site in the same year, have made significant contributions to our understanding of the past that would otherwise have been impossible (Finlayson 1977:210; Wright, J.V. 1974:291).

That there is much on archaeological sites in the way of preserved material items that cannot be seen with the naked eye or recovered via the sifting of soil through 1/4 inch screening has been demonstrated time and time again (Shaffer 1992; Struever 1968:353; Thomas 1969:394). The most cogent illustration of this is a table compiled by David Thomas wherein he recorded the number of faunal elements recovered from three stratified archaeological sites using 1/4, 1/8, and 1/16 inch screens. In more than one instance, 100% of the material was lost through the 1/4 inch screen and as much as 94% through the 1/8 inch screen. Although these percentages were usually much lower, it is important to point out that they were highly variable and, thus, indicate that the archaeologist has no way of knowing in advance how much will be caught by the 1/4 inch screen and how representative it may be of the total sample. In fact, additional research

indicates that – at least with regard to mammals – material derived solely from 1/4 inch screen will *not* be representative (Shaffer 1992). Larger mammals will almost certainly be disproportionately represented against smaller species that may not even show up at all:

> Mammals with live weights of less than 140g are almost completely lost by 1/4" screening. Specimens weighing from 71 to 340g are poorly represented, while specimens weighing from 340 to 3,100g are represented by most elements except foot bones. Taxa greater than 4,500g are represented by most elements (Shaffer 1992:129).

If some *mammals* are not caught in 1/4 inch screening, then it stands to reason that many other animals – fish and birds, for example – will also fail to be recognized. Indeed, Bill Finlayson ascertained during his 1971 excavation of the Saugeen Donaldson site that smaller fish, like Shaffer's smaller mammals, tend to appear to be absent when only 1/4 inch screening is used (Finlayson 1977:484-488). In addition, all but the largest of plant seeds and organic items like carbonized corn cobs and charcoal will be lost thus negating the significance of almost all plant foods in the diet of the people under investigation. Even some artifacts, such as beads and micro-flakes, will be lost. In fact, the *only* evidence of contact between the St. Lawrence Iroquoians and Europeans, a very small iron awl from the Maynard-McKeown site, would not have been recovered without the use of 1/16 inch screen (Wright, J.V. & Wright, D.M. 1993:2). Quantitatively, then, while it may appear that relatively little material is recovered in 1/16 inch screens,

Figure 14: This small (2.5 cm) European iron awl from the Maynard-McKeown site would have been lost without flotation and screening of pit fill from the site.

such things as are caught may be quite significant – constituting, perhaps, the only evidence for the use of certain plants and animals, contact between groups, and so on.

Unfortunately, screening is not the ideal solution to the problem of uncovering the maximum amount of information a site has to offer; for example, very small seeds like tobacco will pass through even 1/16 inch screening (an ounce of tobacco seed is roughly equivalent to 300,000 individual seeds (Heiser 1987:173). Moreover, the mechanical damage done to faunal remains, artifacts, and delicate botanical items like seeds and charcoal by workers facilitating the process of sifting by running their hands over the soil in the screen and breaking up clumps, or using water under pressure for the same purpose, can be considerable (Ball & Bobrowsky 1987:85; Pearsall 2000:13; Wagner 1988:19; Wright, J.V. & Wright, D.M.1993:2; Yarnell 1984:95). The proper use of flotation, however, "…allows recovery of all size classes of botanical [faunal, and artifactual] material preserved in a sediment sample" (Pearsall 2000:14), often with less mechanical damage.

Flotation has added greatly to what is known about the people who once inhabited what is now Ontario. For example, the Maynard-McKeown site flotation produced evidence, by the presence of small bits of shell which presumably adhered to the meat, that mussels were an important food item even though the shells themselves were disposed of elsewhere (Wright, J.V. & Wright, D.M. 1993:2); the Archaic McIntyre site flotation added fifteen faunal species to a site total of thirty-five utilized species (Waselkov 1984:137); flotation at Cootes

Paradise determined that what is today a wetland filled with bulrushes was once a wild rice marsh (Smith 1997); flotation at the 16th-century Wendat Keffer site produced numerous fish bones but generally not fish heads, suggesting that the fish had been decapitated and their heads discarded at the capture site (Stewart 1991:104); and at the mid-14th-century Middleport Wiacek site, where dry-screening had only produced evidence of corn and butternut, flotation added evidence of a variety of wild and cultivated plants including beans, sunflower, tobacco, acorns, and various berries and grasses (in addition to carbonized wood) (Lennox et al. 1986:132-147).

Elsewhere in the world, flotation has produced "some of the earliest evidence for domesticated small grains and legumes in the Near East", the earliest plant use by the Greeks, and the dependence of eighth millennium Syrians on wild varieties of einkorn and barley rather than domesticates (Watson 1976:87). Perhaps the most telling indication of the impact of flotation on archaeology, however, can be seen in the following statement:

> '…our preliminary report…states confidently that 'plant remains were scarce at Ali Kosh'…Nothing could be farther from the truth. The mound is filled with seeds from top to bottom; all that was 'scarce' in 1961 was our ability to find them, and when we had added the 'flotation' technique…in 1963 we recovered a stratified series of samples totaling over 40,000 seeds' (Hole, Flannery, and Neely quoted in Watson 1976:87).

A more radical departure from Struever's original method was implemented by Dawn and Jim Wright when they flotated almost twenty-seven tonnes of pit fill from more than one thousand features at the Maynard-McKeown site (Wright, J.V. & Wright, D.M. 1993:1). Experimenting with a number of

Figure 15: James V. Wright processing some of the almost twenty-seven tonnes of pit fill from the Maynard-McKeown site.

different methods, they ultimately settled on a sort of marriage between traditional screening techniques and flotation. The soil from pit features was sifted through nested No. 8 (2.36mm) and No. 16 (1.18mm) Canadian Standard geological sieves which were submerged in the shallow water of an old bathtub and gently rotated. This "swirling" was observed to produce a "…colloidal affect [that] assured that spores, blueberry seeds, and other items smaller than the actual No. 16 screen size were retrieved" (Wright, J.V. & Wright, D.M. 1993:2).

Figure 16: Decorated bone awl found near the palisade.

Faunal Analysis

Frances Stewart undertook the faunal analysis of Houses 2, 10, and 13 for her doctoral thesis in which she examined Wendat and St. Lawrence Iroquoian subsistence as reflected within select longhouse structures at the Maynard-McKeown and Keffer sites (1999). Unfortunately for the present study, her research was entirely focused on subsistence and the data from these houses was presumably interpreted as exclusively gastronomic rather than

potentially ritualistic. Discussion of non-dietary fauna was functional and included considerations of the use of animal skin and bones for clothing, blankets, and tools – but not ritual (Stewart 1999:27). Consequently, the only ritual features that could be identified in these houses were found in House 13 with a non-fauna ritual feature and a feature that included bones identified during the course of the flotation undertaken by Dawn and Jim Wright (1993).

The bulk of the faunal analysis was completed by Ostéothèque de Montréal (1989). This included 27,499 unmodified non-shell faunal fragments from the rest of the houses excavated at the site (with the exception of House 9 for some unknown reason) and areas outside of the houses. Unfortunately, once again the emphasis was on subsistence. As the analysis was conducted by house rather than by feature, it is impossible to use the report to assess patterns the author(s) may not have considered. Certain features, like the bear burial, were highlighted but it is probable that more have been lumped with culinary fauna and their original meaning thereby obscured. Fortunately, certain features were recognized as unusual and noted in the report. However, as the report author(s) did not realize that features were numbered by excavation square rather than by house, references to particular intra-house features potentially pertain to several features with the same number. In most cases, the artifact catalogue and feature forms created during the excavation of the

Figure17: Decorated bone awl from House 5.

site help to resolve the resulting confusion. However, these feature notations are also deficient in that discussion of cut marks, burning, and the relative age of the individual (juvenile or adult) is handled inconsistently.

Figure 18: Broken needle from House 10.

Another shortcoming is that specific faunal elements are not discussed. This is unfortunate because there is considerable evidence that certain elements were meaningful in ways other than simply as the inedible remnants of meals. For example, the *os baculum* of bear and raccoon were identified by Wintemberg at the Roebuck site just as they have been noted at other Iroquoian sites in clearly meaningful (e.g. mortuary) contexts (Canadian Museum of Civilization Archival Document 196, vol. 4, Wintemberg; Parker 1920:292; Sempowski & Saunders 2001:377-378). It is certainly possible that they are part of the Maynard-McKeown fauna but, if they are, they are subsumed under species categories.

Considerable effort over the course of several months was expended attempting to procure a copy of Bruce Jamieson's analysis of the worked animal bone from the site to no avail.

Rim Versus Vessel Analysis

To analyze vessel fragments individually as though they were representative of a whole, as many early scholars did, would unnecessarily bias the results of this study. Instead, every reasonable attempt to isolate the various fragments according to vessel has been made. The Minimum Number of Vessels

(MNV) (Rice 1987:292) was ascertained by establishing both morphological and metrical equivalencies. Those rims that were considered analyzable (had enough of the interior, lip, and exterior collar decoration present to determine decorative treatment or lack thereof) and expressed the same decorative motif, comparable size as determined by comparison with a template of 1 cm interval concentric curves, and no more than 1 mm variation in lip width and 7 mm variation in exterior design motif length, have been interpreted as deriving from the same vessel.

The accuracy of this approach was tested by measuring both the exterior motif height and the lip width of rims from restored whole, or nearly whole, St. Lawrence Iroquoian ceramic vessels curated at the Canadian Museum of Civilization. As a result, each pot constitutes a statistical population (universe) with a range of variation established by the rims of which it is comprised. St. Lawrence Iroquoian vessels alone were included in this sample because these pots tend to be superiorly crafted with the result that other vessels are not comparable. Demonstration of this skill may be seen in the remarkably minimal exterior motif height and lip width variation of the pots included in Table 2. Assessing the range of lip width ranges for the four pots demonstrates that there is less than 1 mm variation. Similarly, the range of ranges for exterior motif height is only slightly more than 7 mm. It would be interesting to see how many modern potters could replicate this, as the St. Lawrence Iroquoians did, sans wheel.

Roebuck		*Small, complete, pot*		
	Rim #1	Exterior motif height	19.51mm	*Range*
		Lip width	6.35mm	Exterior motif height
	Rim #2	Exterior motif height	19.65mm	17.84mm – 19.65mm = 1.81mm
		Lip width	5.57mm	Lip width
	Rim #3	Exterior motif height	17.84mm	4.91mm- 6.35mm = 1.44mm
		Lip width	5.10mm	*Mean*
	Rim #4	Exterior motif height	19.43mm	Exterior motif height = 19.11mm
		Lip width	4.91mm	Lip width = 5.48mm
Roebuck		*Small, complete, pot rim*		
	Rim #1	Exterior motif height	32.32mm	*Range*
		Lip width	4.15mm	Exterior motif height
	Rim #2	Exterior motif height	26.26mm	24.32mm-32.32mm = 8mm
		Lip width	4.58mm	Lip width
	Rim #3	Exterior motif height	30.16mm	4.15mm-4.60mm = 0.45mm
		Lip width	4.44mm	*Mean*
	Rim #4	Exterior motif height	25.35mm	Exterior motif height = 27.68mm
		Lip width	4.60mm	Lip width = 4.46mm
	Rim #5	Exterior motif height	24.32mm	
		Lip width	4.52mm	
Roebuck		*Medium, incomplete, pot rim*		
	Rim #1	Exterior motif height	39.78mm	*Range*
		Lip width	6.95mm	Exterior motif height
	Rim # 2	Exterior motif height	42.50mm	39.71mm-42.50mm = 2.79mm
		Lip width	6.39mm	Lip width
	Rim #3	Exterior motif height	41.10mm	6.39mm-7.42mm = 1.03mm
		Lip width	7.42mm	*Mean*
	Rim #4	Exterior motif height	40.63mm	Exterior motif height = 40.61mm
		Lip width	7.14mm	Lip width = 7.02mm
	Rim #5	Exterior motif height	39.95mm	
		Lip width	7.36mm	
	Rim #6	Exterior motif height	39.71mm	
		Lip width	6.83mm	
Maynard-McKeown		*Large, incomplete, pot*		
	Rim #1	Exterior motif height	45.15mm	*Range*
		Lip width	7.51mm	Exterior motif height
	Rim #2	Exterior motif height	45.30mm	44.41mm-45.30mm =0.89mm
		Lip width	7.37mm	Lip width
	Rim #3	Exterior motif height	44.90mm	7.37mm-8.37mm =1.00mm

	Lip width	8.37mm	*Mean*
Rim #4	Exterior motif height	44.41mm	Exterior motif height = 44.94mm
	Lip width	7.49mm	Lip width = 7.69mm

Table 2: Exterior motif height and lip measurements from nearly complete or complete St. Lawrence Iroquoian pots.

A Gendered Interpretation of Settlement Pattern and Material Culture

Of primary concern to the study of past gendered use of space is the means by which gender and space are associated. Acknowledging that scientific inference is always a matter of probability rather than certainty, how do we determine to an acceptable – in other words, rigorous – degree of probability that a particular archaeological feature was significant with respect to women or that a building was used by men only? In the absence of possible future technological developments, the only relatively straightforward way of relating space to gender at present involves the contextual study of human burials of individuals of sufficient age, and in a suitable state of preservation, for sex to be assessed. Once gender has been established, a host of data concerning the position of the body, material culture inclusions, health, artificial modifications, and trauma can provide potentially significant insights into the lifeways of past men and women. For instance, in a discussion of burial inclusions at the late 16th-century Seneca Adams site in New York State it was determined that the "complex of artifacts associated with adults seems, to a great extent, to have been determined by the sex of the individual" (Wray et al. 1987:178). Generally speaking, women were buried with ornamental items, ceremonial objects, subsistence related materials (including food) and the occasional utilitarian item whereas male interment

inclusions were more commonly utilitarian, consisting of tools and weapons, with an occasional ornamental item (Ibid.). More specifically, certain objects were found in association with only one sex, including "glass beads, brass spirals, and bands" with women and smoking "pipes, small animal skin pouches, sets of cut animal jaws, [and] human skull rattles..." with men (Ibid.).

It is feasible that subsequent research in some such instances could be premised upon an extrapolation of intra-site burial data to non-burial contexts; for instance, if certain artifacts can be determined to be associated with gender in a burial context, it may reasonably be inferred that their occurrence in non-burial contexts is also related to gender. In the absence of this, linking gender and space in non-burial contexts is significantly more challenging and, of necessity, must rely on: (1) historical documentary evidence, (2) ethnography, and (3) burial data from other Iroquoian populations for information concerning what constituted gender-specific activities and material culture. As excavation of human burials at the Maynard-McKeown site was precluded by the archaeological licence agreement with the Province of Ontario and such data is severely limited for most St. Lawrence Iroquoian sites, this is the course of action indicated in this instance.

Analogy is therefore integral to the research to be discussed. Although some scholars have voiced concerns about it, Wylie has affirmed that *all* archaeological enquiries entail analogical arguments to some extent and, accepting that, we need to ensure the strength and stability of our interpretations with as many solid correspondences between source and subject as possible (2002:150). Furthermore:

> Whatever plausibility this initial analogy enjoys derives from its being based on a systematic comparison of source and subject that establishes not only a number of similarities between them but also weighs these similarities against the differences. These considerations (of the extent and proportion of similarity) provide a measure of the degree of fit between the source (or analog) and the subject of interpretation; together they constitute the primary criterion for evaluating a formal analogy (Wylie 2002:149).

The Direct Historical Approach constitutes a strong analogical argument because it involves a logical progression of overlapping archaeological evidence through time (Wylie 2002:141). Unfortunately, the St. Lawrence Iroquoians disappeared from the archaeological and historical record in the midst of the historic period and sites, like Hochelaga, mentioned by early explorers have only tenuously been identified thereby invalidating the use of this method (Trigger & Pendergast 1972). Nevertheless, several other reasons justify the use of data derived from ethnographic, historic, and archaeological sources regarding the Iroquoians generally for insights into the lifeways of the St. Lawrence Iroquoians. These include the following: (1) as per Clark's suggestion that analogs should be sought where actual historic ties can be demonstrated (Wylie 2002:139), it is significant that linguistic evidence indicates that the historically known Iroquoian tribes and confederacies shared a common descent and that, furthermore, the practice of prisoner adoption means that more recent Iroquoian populations of seemingly differing, yet Iroquoian, ethnicity included individuals of St. Lawrence Iroquoian descent; (2) Iroquoian material culture demonstrates widespread cultural continuity and, correspondingly, a conservative attitude toward change; (3) also according to Clark's recommendation, Iroquoian analogs are drawn from tribes and tribal confederacies practicing a common subsistence economy in

comparable ecological conditions with the *western* St. Lawrence Iroquoians (the eastern St. Lawrence Iroquoians are essentially excluded because their economy was not primarily horticultural) (Wright, J.V. 2004b:1238; Wylie 2002:140); and, (4) reflecting Hawkes' concerns regarding diffusion spheres, it is relevant that the Iroquoians of both the distant and near past resided in the same relatively concentrated region. Furthermore, while unfortunately ignoring the potential contribution of archaeology, the anthropologist William Fenton observed that:

> After midcentury, when the Hurons, Neutrals, Petuns, and Eries were dispersed, destroyed, or incorporated among the Five Nations, the lifeways of New World peoples were losing their fascination for literate Europeans. As a result, except for vignettes of dream rites, warfare, and some other details, scholars are dependent on the ethnography of Huronia for early Iroquoia as well, the assumption being that the [League] Iroquois and the Huron were generally similar. Conversely, many of the major patterns so well understood for the nineteenth-century [League] Iroquois can be assumed to have been present among all the northern Iroquoians during earlier times. An attempt at delineating the northern Iroquoian culture patterns is thus at best a reconstruction, based both on the early French sources and on the later ethnographic research on the Iroquois... (Fenton 1978:296).

Ethnographic and historic data can and have been profitably used in Iroquoian research in the past and, with the insight afforded by retrospect, it is clear that the best uses of these sources involve an acceptance or rejection of individual references after due consideration of the personal, temporal, and cultural bias of the author, the transparency of the people whose actions, beliefs, and expressions are ostensibly described, the immediacy of the description (e.g. was it written by a witness or as a result of consecutive occurrences of hearsay?), the social continuity of that which is expressed to the same people over the course of time, and, possible ethnic confusion stemming from inter-tribal adoption and marriage (Mason 2006). Such consideration can only take place on a case by case

basis and will always be imbued with a certain amount of subjectivity. Archaeology, of course, also has inherent limitations – most notable being the dearth of material evidence that actually survives the passage of time – but when such data is used in concert with data from other sources, like historical documents and ethnographic texts, the potential exists for its weaknesses to be offset by the strengths of these other types of evidence and vice versa.

Taking all of the above into consideration, there is yet solid evidence that, in Iroquoian society, women were responsible for food production as it pertained to plants, cooking, raising children, caring for the dead and their resting places, and the social welfare of their lineages, clans, and villages while men hunted, built the village, the palisade, and longhouses, conducted trade, participated in war and were responsible for the political welfare of their society (Boucher 1883; Fenton 1978:297-300, 309; Fenton & Moore 1974:69-70). Interestingly, this would appear to conform to a cross-cultural norm applicable to non-industrial societies generally:

> Gender is commonly acknowledged to be a ubiquitous and fundamental component of social identity. It is also generally agreed that, while beliefs concerning masculinity and femininity are culturally constructed, prior to modern times all gender systems were based on the belief that men and women had different roles and responsibilities in social reproduction and maintenance. Men and women in every society dressed and behaved differently from each other...and in all preindustrial societies, crafts, or individual processes within crafts, tended to be segregated according to gender...There is much evidence that women's interests were expressed primarily in relation to their families while men's concerns were expressed in relation to the broader socio-political sphere (Trigger 2003:187).

Ceramic artifacts and remnants of ceramic artifacts constitute the vast bulk of the material culture remains that typically survive to be excavated on Iroquoian

sites (Tuck 1978:329). Traditionally, archaeologists have assumed that the vessels used by women to prepare meals and store food were also made by women while the smoking pipes used by men alone or in council were made by men. And, despite the fact that women and craftsmanship of any sort were infrequently mentioned in the historic documents as neither was particularly germane to the agendas of the various explorers, religious, and politically-minded individuals who authored them, there is nevertheless textual evidence from this period that indicates that women did, indeed, make the pots. The earliest of these dates to 1623-1624 and was documented by Gabriel Sagard, an extremely curious and observant member of the Recollects, a defunct branch of the Franciscan religious order:

> ...the Hurons and other sedentary tribes and nations used and knew how to make earthenware pots, as they still do, firing them in their ovens. They are very good and do not break when set on the fire even though they may not have water in them. But they cannot stand moisture and cold water for long, but become soft and break at the least blow given them; otherwise they last for a very long time. The women savages make them, taking suitable earth which they sift and pulverize very thoroughly, mixing it with their fist, and this they keep enlarging, scraping it inside with a little wooden paddle as much and as long as is necessary to complete the work (Wrong 1939:109).

Considered by Radcliffe-Brown to be a pioneer of the field of modern social anthropology, Joseph François Lafitau, of the Jesuit order that replaced the Recollects in Huronia after Quebec was taken by the English in 1629 and not permitted to return by Richelieu's decree once the territory was restored to the French a few years later, observed during the course of the six years he resided in New France (1712-1717) that: "Every morning the women prepare this sagamité [a corn soup or porridge] and bring it to a boil for the nourishment of the family.

Before the Europeans had brought them kettles from beyond the sea, they used pottery vessels which they worked quite skilfully..." (Fenton & Moore 1977:xxix, xxxi, 60; Wrong 1939:xviii).

The earliest reference to the use of tobacco, or *Quyecta*, by men, and correspondingly of the pipes which were used to smoke it, pertains specifically to the St. Lawrence Iroquoians (Cook 1995:69, 94). During the 1535-1536 voyage of Jacques Cartier, it was recorded that:

> ...they have a plant, of which a large supply is collected in summer for the winter's consumption. They hold it in high esteem, though the men alone make use of it in the following manner. After drying it in the sun, they carry it about their necks in a small skin pouch in lieu of a bag, together with a hollow bit of stone or wood. Then at frequent intervals they crumble this plant into powder, which they place in one of the openings of the hollow instrument, and, laying a live coal on top, suck at the other end to such an extent that they fill their bodies so full of smoke that it streams out of their mouths and nostrils as from a chimney. They say it keeps them warm and in good health, and never go about without these things (Cook 1995:69).

Between the time Pierre Boucher emigrated early in the seventeenth century to New France at the age of thirteen and his death in the settlement named for him at the age of ninety-five, this soldier and politician lived among and worked closely with the Iroquoian and Algonquian nations of this region, recording his observations of their cultures for posterity in *Histoire veritable et naturelle* (Hallowell 2004:80). On the subject of men making pipes and women making pots, he said: "It is they…who cultivate the fields of tobacco and make the calumets or pipes which they use in smoking; the women make the earthen vessels…" (Boucher 1883:55).

There can be little doubt that it was in large measure due to the existence of these and other historic and ethnographic references that Iroquoian

archaeologists have almost always proceeded with their research on the assumption that men made the pipes and women made the pots. Nevertheless, archaeological evidence in support of the association of men with pipes and women with pots can also be derived from the observation of pots and other items of female material culture - but not pipes or objects of male material culture – in the villages of foreign nations as it is known that Iroquoian warfare commonly involved the killing of male enemies and the adoption of females and children (Knowles 1940; Williamson 2007:194; Wright, J.V. 2004b:1240). MacNeish demonstrated some while ago that specific combinations of ceramic attributes on pots are related to broad spatial regions that appear to correlate with areas of tribal influence (1952; see also Bradley 1987:56). So, when vessels that correspond with one area are found on sites in another – and are clearly not the product of inter-tribal trade as demonstrated by Trigger's trace element analysis study which showed that such pots were made from the same local clays as those of their hosts – the interpretation of this occurrence as the product of captured and adopted women of foreign nations seems highly probable (Trigger et al. 1980).

In addition to the insights afforded by historic and ethnographic texts with respect to past gendered activities and material culture, there are clues that geographic space and the mediums from which artifacts were crafted were also considered relevant to gender. In the first instance, several authors have commented on the longhouse being the realm of women whereas men's place was at the wood's edge; in fact, the tradition of formally greeting strangers – including Cartier – at this spot has been estimated to be *at least* four and a half centuries old

(Fenton 1998:180, 400; Prezzano 1997:90; Sempowski 1986:35):

> Many of the rites and legends of the medicine societies have associations with the forest, while many of the thanksgiving ceremonies held in the Longhouse have agricultural connotations – a difference that reflects the two worlds of Iroquois culture: the world of the forest and that of the clearing. In prereservation Iroquois society, the forest was the domain of the men. They cut the clearing out of the forest and constructed the village in it using materials from the forest. But once this was done, the clearing and the village became the domain of the women. Women did virtually all the agricultural work – planting, weeding, and harvesting. When not in the fields, women were often in the village preparing food for storage, making the baskets and pots in which these provisions were kept, cooking the food, taking care of the children, and making the clothing. Men were often away from the village on hunting, trading, and war expeditions. Life in the village was dominated by women (Tooker 1978:461).

Furthermore, as discussed in the Introduction, women were intimately associated with creation and men with destruction which makes the practice of removing prisoners of war from the longhouse prior to their execution a potentially telling comment on the use of village space (Knowles 1940:187; Shimony 1994:154-155; Tooker 1984:205; Waugh 1916:3). Possibly, it was not considered appropriate to enact destruction in a dwelling associated with creative powers and influence. Certainly, "Condolence Councils can only be held in late fall after the crops are in or in the winter season because of the harm to growing crops that might accompany a ceremony associated with death" (Hall 1997:35). Although men and women alike used longhouse and village space in a routine manner, it is hypothesized that, when it came to significant events like rituals, archaeological evidence of women's rituals may be found within longhouses while men's may have occurred away from the village, at the wood's edge, or possibly in the intra-village areas between longhouses.

Similarly, although both men and women would have used such mundane

items as baskets, ceramic pots, bone awls, and stone tools on a more or less daily basis, there are indications in the ethnographic literature that gender and the medium of the object involved determined who crafted these items: "It was the source of the raw materials, field or forest, that decided the gender of the manufacturer" (Mann 2000:228). Thus, by associating medium and gender with extant evidence of gendered occupations and material culture, it may be hypothesized, for example, that items made of plant fibres like baskets and corn husk mats would have been crafted by women whereas products of the forest – like wood and bone from the animals hunted there – would have been used by men to make such items as ladles and awls. A difficulty, however, presents itself: if this line of reasoning has merit, the possibility must be considered that women, who worked with such products of the earth as plants and clay, also made the clay smoking pipes (Chapdelaine 1992:34). According to that doyen of Iroquoian anthropology (and a Seneca native himself), Arthur C. Parker, "Iroquois stone pipes in general are so unlike their clay pipes that they bear no resemblance of having been made by the same people" (Parker 1916:488). Nevertheless, this possibility has ultimately been rejected by at least one researcher as untenable based on a study of historic documentary evidence, burial inclusions, and a stylistic comparison of pipes and pots (Kuhn 1985:59-77). It may simply be that, just as the practice of men tending tobacco plants goes against the Iroquoian norm of women being the gardeners, smoking and everything associated with it is exceptional.

CHAPTER THREE: RITUAL FEATURES

Although the publications of many of the early Iroquoianists like Arthur Parker and John Hewitt illustrate a keen interest in past symbolism and ritual, research of this nature suffered a protracted decline after their demise as attention shifted to technological and ecological interpretations of archaeological evidence. In the 1970's, however, interest in the ideology of past societies began a slow renewal. Heralding this development was Robert Hall's *An Anthropocentric Perspective for Eastern United States Prehistory* in which he argued for the need of an "anthropocentric" perspective to balance the aforementioned "geocentric" perspective (1977).

Much of the work that has been done in this regard with respect to Iroquoian archaeology since involves the analysis of individual objects or categories of material culture in light of insights culled from historical and/or ethnographic records (e.g. Jamieson 1983, Sempowski 2004, Williamson & Veilleux 2005). For example, it is fairly common for researchers to report on the presence or absence of evidence of burning of faunal elements as it is well known from the historic documents that it was considered taboo to burn the bones of some animal species:

> The special relationship between men, animals, and dogs is indicated in the Huron belief that while hunting, the bones of deer, moose, and other animals or, while fishing, fishbones, should not be thrown to the dogs or into the fire and that the fat of the animals should not drop into the fire. If this happened, the other animals [of the same species] would hear of it and would not let themselves be taken (Tooker 1991:67).

The identification and analysis of distinct archaeological *features* reflecting past ritualistic practices is far less prevalent in the extant literature.

Two noteworthy exceptions include a feature at the Middle Ontario Iroquois Nodwell site that contained two puppies buried beneath a complete ceramic vessel and a pit at the Early Ontario Iroquois Calvert site that produced a stone pipe with the bones of a Carolina Parakeet that might be expected to remain in a skin of such a bird (von Gernet & Timmins 1987:35; Wright, J.M. 2004; Wright, J.V. 1974:88). Other examples exist but, by and large, the recognition of meaningful features has been essentially haphazard.

To mitigate this requires three things: (1) strong contextual data, (2) a thorough familiarity with relevant historic, ethnographic, and archaeological literature, and (3) a cross-cultural awareness of the variety of ways in which ritual *can* be expressed. Ritual is the behavioural expression of cosmology. As such, it is both sensory and patterned and, where there is a material component, this can be advantageously assessed just as any other aspect of culture might be examined.

While Wintemberg's descriptive abilities and attention to detail have ensured that his site reports are still utilized almost a full century after they were written, his publications are not strong on contextual data. At the Roebuck site, he was only able to identify middens and the palisade (Wintemberg 1936:4-10). He speculated that some of the postmoulds that clearly did not relate to the palisade belonged to longhouses, but he was uncertain (Wintemberg 1936:10-11). With the passing of Wintemberg, St. Lawrence Iroquoian archaeology was essentially ignored for almost a half century. Jim Pendergast, to his great credit, resurrected it. Unfortunately, even after all of the time that had passed, the importance of context was still not recognized for a few more decades.

Pendergast was principally interested in ceramics and excavated middens exclusively to get the samples he felt he needed. By the late 1970's, however, the contextual excavation and analysis of large sites like Draper and Nodwell heralded a change in St. Lawrence Iroquoian archaeology. Portions of four longhouses were excavated at the Beckstead site, finally permitting access to insights derivable only from an understanding of provenience (Pendergast 1984). By the time that the Maynard-McKeown site was excavated during the summer of 1987, Pendergast was willing to adopt the provenience recording system established by the London Museum of Archaeology (now the Museum of Ontario Archaeology) and hire Dawn Wright, who had been involved in the Nodwell site excavation and thus had the requisite experience, to implement it. Although the system can be improved, it has provided the basis from which several apparently ritualistic features could be recognized. As will be seen in the next few pages, several of these involve the intentional burial of entire, or nearly entire, objects or animals.

Double Vessel Burials

At the late sixteenth to early seventeenth century Seneca Adams, Tram, Cameron, Dutch Hollow, and Factory Hollow sites, complete (although not necessarily unbroken) ceramic pots were frequently found in association with human burials (Wray et al. 1991: Appendix B; Sempowski et al. 2001 pt. 1: 132, pt. 2:409, pt. 3: Appendix B; Wray et al. 1987: Appendix B). Most often, only a single pot was present but there were several instances in which two, three, or

more were excavated in association with one or more human burials (Ibid.). The vast majority of these interments involved children and, where sex could be determined, women. For example, of fifteen instances of double-pot interments at the Dutch Hollow site, ten were with children or adolescents, one was with a combined child/adult female burial, two were with an adult of indeterminate sex, and two were with burials for which neither relative age nor sex information was available (Sempowski et al. 2001 pt. 3: Appendix B). At the Cameron site, twelve double-pot burials are attributed to eight children or adolescents, one combined young adult (possibly female) and child burial, one young adult of indeterminate sex, one young adult male, and one adult (possibly female) (Sempowski et al. 1991: Appendix B). At Factory Hollow double-vessels were associated with nine burials: one child, three combined child/unsexed adult burials, two adult females, two unsexed adults, and one for which there was neither sex nor relative age data available (Ibid.). At the Adams site, another nine double-pot burials were excavated: two with children, one in a combined child/adult female interment, one in a combined adolescent/young adult/adult female burial, two in separate instances involving the interment of three adult females, and three in discrete adult female burials (Wray et al. 1987: Appendix B). Of three double-pot interments at the Culbertson site, one was associated with an adolescent (possibly female), one with an adult (possibly male), and another with an elderly individual of indeterminate sex (Wray et al. 1987: Appendix B). There were only two double-pot burials at the Tram site, one in association with an adult female burial and another with a paired adolescent and young adult burial, both possibly female

(Sempowski et al. 1991: Appendix B). Since, at the Kleis site, an early 17th-century Iroquoian site possibly related to the "legendary Kahkwa", the pattern of double-pot burials conformed in a remarkable seven instances to mother-child interments, it seems clear that double-pot burials were perceived by Iroquoians generally as significant with respect to children and women (Gramly 2000:6, 45).

There are very few references in the published literature to pot burials on Ontario Iroquois Tradition sites but it is difficult to assess whether this is a reflection of the relative rarity of this phenomenon or of the authors of the reports failing to distinguish these occurrences from more commonplace pottery fragment recoveries. The incidences that have been noted include: five separate in-house single-pot burials at the mid-13th-century Bennett village site, an infant interred inside a pottery vessel at a small Middleport substage ossuary, and two puppies buried beneath a whole pot in a longhouse at the mid-14th-century Nodwell village site (Wright, J.V. 2004b:1371, 1374, 1974: 88, 136, 187, 278, 1969:23-24).

As previously mentioned, very little data concerning St. Lawrence Iroquoian human burials is available but, of that which does exist, it is clear that burial inclusions of any kind are extremely rare. An exception, however, was excavated by Wintemberg at the 15th-century Roebuck site, located less than ten kilometres from the Maynard-McKeown site, with the burial of a woman with a "beautifully formed pottery vessel...[sitting] upright and filled with discoloured sand" (Wintemberg 1936: 117, Plate XI; Wright, J.V. 2004b:1261). Two instances of single-pot burial were also excavated within a longhouse at the 15th-

century Beckstead site, situated forty kilometres from the Maynard-McKeown site, but it is unlikely that either was associated with any of the human burials that were also found in the house (Pendergast 1984:161, 182-185; Wright, J.V. 2004b:1276). Consequently, the *only* Ontario Iroquoian double-pot burials known to exist are those which were excavated at the Maynard-McKeown site. Neither was associated with human interments.

The less complex of the two double-pot features at the site occurred in House 13. Also included in the feature were a modified deer phalange, miscellaneous modified bone, miscellaneous bone and antler fragments, charcoal, and incompletely carbonized wood fragments. Unfortunately, most of these items were unavailable for study as this report was being prepared leaving no recourse but to rely on Jim Pendergast's preliminary published statement regarding this feature. As Pendergast was an expert Iroquoian ceramist, his assessment of the vessels is considered to be dependable. It should be noted that, as with the present study, he recognized the existence of a conceptual link in Iroquoian cosmology between pots and population:

Figure 19: House 13 double-vessel burial. The outer vessel is a well-crafted St. Lawrence Iroquoian pot and the inner vessel is a mock Wendat pot.

> ...a large elaborately decorated typical St. Lawrence Iroquoian pot was excavated in a debris-filled deep seed-corn cache pit located on the north side in the east end of House 13. This was a core village house which had been demolished to provide space for a Phase 1 expansion house. The vessel lay

> complete but fragmented approximately one metre below the surface on a bed of birch-bark fragments. Inside this vessel was a smaller pot with the single overhanging pointed castellation which gives many late prehistoric Huron vessels their characteristic shape...However, neither the incised horizontal motif on the collar nor the side-by-side transverse paddle-edge decorative stamping on the lip of this vessel are reminiscent of Huron decorative motifs. The general impression is that a non-Huron potter, probably a St. Lawrence Iroquoian, attempted to replicate a common Huron vessel with marginal success...The body of this Huron-like vessel is seldom more than three or four millimetres thick and it is very friable. Unlike the large St. Lawrence Iroquoian vessel, which was a wholly serviceable cooking pot, the Huron-like small vessel is quite unserviceable. Indeed, this vessel gives the impression of it's [sic] having been made for the specific purpose of being fitted into the large St. Lawrence vessel. This impression is reinforced by the close tolerances by which the small pot is able to pass through the throat of the St. Lawrence vessel...there is the possibility of symbolism in which the Huron, represented by the small Huron-like pot, are being subsumed or ingested by the St. Lawrence Iroquoians by the ritual of the Huron-like vessel being placed inside the large St. Lawrence vessel. Archaeological evidence indicates that the Huron and the St. Lawrence were engaged in a war circa A.D. 1500 which, in part at least, was responsible for the destruction of the St. Lawrence Iroquoians. Any ritual which would portray one or the other of these groups subsuming the other would reflect the hopes and aspirations of those engaged in the struggle at the time when the McKeown village was occupied (Pendergast 1988:16-17).

Of all of the Seneca double-pot burials previously discussed, there are only two instances in which the vessels are described as nested (Sempowski et al. 2001: 746, 752).

The second double-pot burial at the Maynard-McKeown site was excavated from a feature within House 9. In this instance, the mouth of one of the pots had apparently been inverted over the mouth of the other pot, although both had slipped over the course of time as shown in Figure 20. The topmost vessel, described by Pendergast as "non-diagnostic", was visibly fragmented and the lower pot was a small finely crafted St. Lawrence Iroquoian pot whole except for a small circular piece that had been removed from the body (Pendergast 1988:17).

A complete but fragmented large discoidal clay bead had been placed at the bottom of the feature and a single piece of chipping detritus, two bone awls, two antler hoes, shell valves, a hard red stone and quartz were found between the two vessels.

Figure 20: House 9 double-vessel burial. The pot on the bottom is complete except for a small circular body sherd that was skilfully removed.

According to Pendergast, discoidal clay beads are a distinctly St. Lawrence Iroquoian trait, making their first appearance around A.D. 1400, and their presence on sites other than these is likely attributable to St. Lawrence Iroquoian female adoptees (Pendergast 1981:57, 66).

As many burned and broken awl tips have been recovered from the site, it is clear that they were frequently used in a fire-related activity that, in all probability, involved food (Parker 1968:73; Wright, J.V. 2004b:1263). The inclusion of the awls is, therefore, conceptually in accord with the pots as are the antler hoes which would have been used in growing the food (Waugh 1916: 14-15; Wright, J.V. 2004b:1249). The presence of the shells could also be viewed in this light if

Figure 21: This large discoidal clay bead had been placed beneath the House 9 double-vessel interment.

one considers the flesh they once contained, although evidence from the Maynard-McKeown site indicates that usually just the meat was brought back to the village (Wright, J.V. 2004b:1256, 1263). However, shell also had a cosmological significance in Iroquoian society as exemplified by its inclusion in burials (particularly those of children), its use in prized wampum belts, and the presence of exotic coastal shell specimens on interior continent settlement sites (Hamell 1989:205, 1983:21; Wright, J.V. 2004:1281, 1359).

Figure 22: A drilled shell from a feature in House 5.

According to George Hamell, both shell and quartz were considered to be "other world" substances and their light, reflective, qualities imbued them with a cultural value in addition to their functional and aesthetic worth:

> When consecrated to ritual use, shell and crystal are metaphors for light, mind, knowledge and/or greatest being. Consequently, these substances are prominent in myths and rituals of (re)creation, resuscitation, and life continuity. Shell is most frequently associated with rituals promotive of the continuity of life in general and the biological and social continuity of human life in particular (Hamell 1983:6).

Considering Iroquoian attitudes toward rebirth and regeneration, the incorporation of shell and quartz in burials therefore constitutes a poignant statement. Furthermore, it appears that quartz may have been thought to have divinitive properties (Hamell 1983:21-23; Wintemberg 1936:73). Certainly quartz is a notable occurrence at St.

Figure 23: The bottom pot from the double-vessel burial in House 9 showing the hole that was created prior to deposition.

Lawrence Iroquoian sites in the Prescott cluster and at the Maynard-McKeown site in particular. At the previously mentioned nearby Beckstead site, for instance, Pendergast reported finding a piece of white quartzite that had been fashioned into an "isosceles triangular-shaped pendant" (1984:47). The occurrence of shell and quartz between the two pots is potentially significant for these reasons. Another possible factor is triboluminescence, the phenomenon whereby quartz fragments rubbed together create a bright flash of light (Reynolds 2009:156). The piece of chipping detritus and the red rock are more mysterious except to note that, being stone, both would normally (like the quartz) be associated with men.

Figure 24: An effigy smoking pipe from House 2 with obliterated face and broken stem.

The hole in the body of the lower pot is also puzzling. There can be no doubt that its occurrence was intentional and, in fact, would have required a considerable degree of skill to execute without shattering the entire vessel. Likewise, effigy pipes have also been known to have been broken and/or ground in ways that cannot be attributed to accident indicating that damage can sometimes be considered a meaningful trait with respect to Iroquoian material culture. Since Iroquoian beliefs were animistic, items like pots and pipes were perceived as having souls that could be released through such damage (Hewitt 1895:108; Wright, J.V. 2004b:1226). As Sagard said, objects were buried with people because, just as it was believed that the souls of the people would go to

heaven so, too, was it thought that the souls of the items interred with them would accompany them:

> For they imagine and believe that the souls of these kettles, tomahawks, knives, and everything they dedicate to them, especially at the great festival of the dead, depart to the next life to serve the souls of their dead, although the bodies of these skins, tomahawks, kettles, and everything else dedicated and offered remain behind and stay in the graves and coffins along with the bones of the deceased (Wrong 1939:172).

Possibly pertinent to an interpretation of this feature are stories related to the fall of Sky Woman from the supernatural realm and the subsequent creation of the earth (Fenton 1998:42). In the various versions of the tale she carries with her corn and meat and, sometimes, cooking implements like a pot, mortar and pestle (Fenton 1998:42; Hewitt 1928:481). Conversely, it may have something to do with her daughter, the Earth Mother who became Grandmother Moon and regulated all things related to women and food crops (Fenton 1998:46; Tremblay 2006:20).

Deer Humeri Feature

Another ritual feature that would seem to incorporate the conceptual association of intentional damage and soul release involved a pit situated between Houses 1 and 2 in which a bundle-burial of four pairs of deer leg bones with elongated holes punched in their proximal ends and decorated with red ochre was excavated in association with other deer bones (personal observation; Wright, J.V. 2004b:1276). A similar

Figure 25: The deer feature during excavation.

feature was noted at the late 13th-century Middle Ontario Iroquois stage Uren site: "...the hitherto unreported and ethnographically unknown practice of perforating paired deer humeri [and]...disposing of them as a bundle in proximity to a human bundle burial" (Wright, M.J. 1986:61). In addition to the approximately three hundred years that separate these sites, there is also a significant spatial separation: the Uren site is located some distance west of the west end of Lake Ontario whereas the Maynard-McKeown site is situated east of the east end of Lake Ontario.

While the Maynard-McKeown feature was not found in association with a human burial as was the case at the Uren site, there are other known instances in which paired deer long bones have been found with human interments. For instance, at the Seneca Dutch Hollow site, two distinct female burials were each accompanied by two deer legs, another woman had six pairs of legs laid across her face, and one woman had eight pairs of deer legs buried with her (Sempowski et al. 2001: 309, 738, 740, 769, 801). None of the deer legs were apparently perforated like those excavated at the Maynard-McKeown site. Nor was the presence of ochre noted.

Interestingly, all three variables of bundle-burial, leg-bone perforation, and ochre have been observed in relation to human, rather than deer, interments at sites across the upper North American Midwest (Hall 1997:30; Mason 1981:290-291; Torbenson et al. 1992; see also Greenman 1967:58, Plates VI and VII). Closer to the Maynard-McKeown site, perforated human long bones from a bundle burial have also been reported at a Western Basin site near Windsor,

Ontario, and in association with the secondary burial of a female in the second and third century A.D. Levesconte Mound near Campbellford, Ontario (Kenyon 1986:29, 31; Wright, J.V. 2004b:1467). However, nowhere are there quite so many intra-site occurrences of it as at Smith Mound Four in northern Minnesota which was built by members of the Laurel culture ca. A.D. 565 (Stoltman 1973:125; Torbenson et al. 1992:507). Although more men were found to have been buried in the mound, of those burials for which sex could be determined, female burials in the mound were equally likely to be treated in this manner (Torbenson et al. 1992:509).

It has been suggested that these perforations were made to extract the marrow from the bones for consumption, a common practice where animal bones were concerned (Mason 1981:291; Torbenson et al. 1992:510-511). However, in examining specific occurrences, as at Smith Mound Four, this explanation has been rejected – as it must be for the Maynard-McKeown deer bones (Torbenson et al. 1992:511). Marrow extraction for consumption would be a viable explanation if the bones in question had been excavated from a midden rather than a discrete feature and shown no signs of ochre; however, this was not the case and the circumstances of the Maynard-McKeown feature indicate that its significance was ritualistic.

Robert Hall has credited James Stoltman with suggesting that the practice of long-bone perforation could reflect an intention to release the soul:

> Punching or drilling holes into the marrow cavities to release the soul would imply a mental association of the marrow with the soul. That is exactly what J.N.B. Hewitt came up with in his 1894 study of the Iroquoian concept of the soul, that is, that the animating soul was believed to reside in the marrow of

> the bones. He tells us that the Iroquois believed that every individual possessed an animating or sensitive soul, which resided in the bones, and one or more reasoning or intelligent souls, which resided in the head (Hall 1997:30).

There can be very little doubt of the importance of deer to the Iroquoian diet; in fact, of all of the faunal remains excavated at the Maynard-McKeown site, deer predominated (Wright, J.V. 2004b:1254). Further evidence of this significance is evident in the existence of taboos pertaining to deer; specifically, the belief that hunting would be unsuccessful if the meat was roasted and the fat allowed to fall into the fire, a belief also noted by Sagard (Biggar 1929 IV:275; Wrong 1939:187). Further beliefs include the notions that charms, such as those sometimes found within bears, could be found in deer and that the strip of fat on the kidney could predict the severity of the upcoming winter (Thwaites 1959 33:213; Waugh 1916:31). It has been suggested that deer scapula pipes, a characteristic item of St. Lawrence Iroquoian material culture, were associated with deer hunting magic as no other animal scapula was modified in this manner (Wright, J.V. 2004b:1244, 1277). And, according to Iroquoian cosmogony and ethnography, the antlers of deer were significant because the good twin, the earth's creator, used them in his battle with his evil twin and they were a hallmark of political authority (Fenton 1998:102; Tooker 1991:155):

> Symbolic antlers of office marked the chiefs, the buck deer being the symbol of manliness, just as venison sustained the people, balancing the 'three sisters' (corn, beans, and squash), the product of women. Chiefs are crowned with antlers; they are dehorned for misconduct. In mortal illness the antlers are removed and set aside pending recovery or death, and then are put on the head of the succeeding chief. To 'lock horns' or 'rub antlers', like bucks in mating season, is the term for the great social dance that concludes an installation ceremony and reunites society (Fenton 1998:102).

Despite the critical importance of deer in terms of food, clothing, and tools, they are generally overlooked in discussions of Iroquoian ritual. Clearly, however, the treatment of deer bones demonstrated at the Maynard-McKeown and Uren sites in a manner anciently associated with human interments is worthy of note in this regard.

Human Skull Gorgets

Ground and polished rounds of human parietal bone with holes drilled around the outer edges are found on many Iroquoian sites but are most closely associated with those of the St. Lawrence Iroquoians (e.g. Chapdelaine 1989:211, Planche 11.23; Jamieson 1990:394; Pendergast 1966:33, 1981b:25, 36; Wintemberg 1936:19, 73-74). Although customarily called "gorgets" it is probable that they actually functioned as rattles (Engelbrecht 2003:43; Jamieson 1983:166; Williamson 2007:203; Wright, J.V. 2004b: 1277, 1383). For Bruce Jamieson, this was initially suggested by the excavation of metal corollaries, lashings still connecting the two halves, at the historic Neutral Grimsby site cemetery (Jamieson 1983:166; Williamson 2007:209):

Figure 26: The human parietal gorgets in situ in House 5.

> ...a rattle comprised of two metal discs strikingly similar in size and shape to human skull 'gorgets' was uncovered. Although the material of manufacture is metal as opposed to human bone, the similarity of metal disc to skull gorget raises the possibility that the metal rattle represents the historic

counterpart of prehistoric human skull rattles (Jamieson 1983:166).

The interpretation that these "gorgets" are, in fact, rattles is further reinforced by the fact that the pair excavated at the Maynard-McKeown site were found *in situ* one atop the other with their edges meeting as one would expect of a rattle. In this instance, each half has three holes but this is not always the case; in fact, from the gorgets and fragments of gorgets he excavated at the Roebuck site, Wintemberg suggested that seven might be the standard number (Wintemberg 1936:74). Subsequent research has determined that there is, in fact, no standard in this regard.

Rattles comprised an important aspect of many Iroquoian rituals, including those of the False Face Society (Fenton 1982:331; Parker 1912:611; Smith 1888:191; Tooker 1970:27). Ethnographic data indicate that, in the historic period, they were frequently constructed from the shell of a snapping or box turtle – where even the limbs, neck and head were incorporated into the finished product – or of horn, bark, gourd, tin or brass (Bogaert 1988:48; Engelbrecht 2003:24, 49, 62 n.14, 150; Fenton 1982:357-359; Parker 1912: 611; Smith 1888: 188; Tooker 1970:27-28). Their purpose was to beat a steady, percussive, rhythm and, at least with respect to turtle shell rattles, "...to maintain the proper balance and harmony in the world" (Engelbrecht 2003:5-6; Tooker 1970:27). A clue to the reason for this can be found in a text written by Arthur C. Parker who said that, with respect to the False Face Society:

> ...the members of the company rub their turtle rattles on pine-tree trunks, believing that thereby they become imbued with both the earth-power and the sky-power. In this use of the turtle-shell rattle there is perhaps a recognition of the connection between the turtle and the world-tree that grows upon the

primal turtle's back (Parker 1912:611).

As discussed in the previous section, there was a widespread Native American belief that the human soul was divisible and a portion remained with its bones after death (Thwaites 1959 10:141). According the J.N.B. Hewitt, this portion was concentrated in the head:

> When once the idea that the sensitive soul resided in the marrow of the bones, the most enduring portion of the human body, became firmly fixed, it was not difficult to follow this with the further doctrine that the brain, encased in the largest bony structure of the skeleton, was the appointed seat and abiding place of the intelligent soul or spirit (1895:111, see also 114).

As discussed earlier, native groups throughout the Americas placed a high value on light, reflective, substances as expressions of otherworldly power (Hamell 1983:6; Saunders 2002, 1999). Shell, quartz crystals, and copper (a bead of which was found with general refuse in House 1) were included amongst these items but, so too, were things that were white (Hamell 1983:5-7). Specifically, white was associated with intellect (Hamell 1983:6). The fact that bone is white would seem pertinent to Iroquoian beliefs regarding the soul and, specifically, the soul that continues to reside with the bones of its body.

It is far more likely that human parietal rattles were made from the skulls of slain enemies than those of community members deemed to be special (e.g. epileptics) because there is well-documented evidence that the heads of the slain, human or animal, were highly significant to Iroquoian warriors and hunters (Thwaites 1959 13:79; Williamson 2007; Wrong 1939:152-153). Wintemberg likely only suggested an alternative to warriors because most of the parietal rattles he excavated at the Roebuck site were made from the skulls of children

(Wintemberg 1936:74; see also Pendergast and Trigger 1972:135 and Wintemberg 1939:36). Generally speaking, these items were made from the parietals of adult males but, while children were often excluded from torture and sacrifice, child immolation did sometimes occur (Thwaites 1959 42:187, 47:149; Wright, J.V. 2004b:1277).

With regard to hunted animals, the heads always comprised the choicest delicacy granted to the most deserving individual at a feast (Thwaites 1959 10:229). As for enemies, either the head or the scalp was often kept and, at least on some occasions, feasted upon (Thwaites 1959 13:61, 79, 15:187; Wrong 1939:162). There was even a supernatural figure in Iroquoian cosmology named Oscotarach (Pierce-Head or Head-Opener) who, residing in a cabin beside the road leading to the Afterlife, removed the brains of the people who passed by; however, testimony differs as to whether he simply kept the brains or ate them (Hewitt 1895:112; Thwaites 1959 10:147; Tooker 1991:141).

Hamell has stated that the purpose of decapitation and scalping was to capture souls (Engelbrecht 2003:43). This is echoed in the Seneca story of Bloody Hand wherein a warrior slain and scalped could not be resuscitated without his scalp first being first reclaimed from his enemies (Curtin & Hewitt 1918:273-276). So, whether a person was captured alive or their scalp or skull were metonyms, that individual's soul – their essence – belonged and contributed to the society that held them (Hall 1997:34). When the Jesuit missionary Jean de Brébeuf was tortured and sacrificed in 1649, it was recorded that, as he was finally about to succumb to death, his scalp was removed, his heart removed and

eaten, and his blood drunk because he had been courageous through the pain inflicted upon him and it was thought that such a quality was transferrable (Thwaites 1959 34:31). This also explains why, when thirteen year-old Mary Jemison was captured and her parents killed in 1755, her face and hair was painted red as were her parent's scalps (Hall 1997:33-34). Considering this with evidence of the association of the colour red with grief, Hall concludes that Mary's adoptive status, her parent's scalps, and the dead were equivalent conceptually (Hall 1997:34). In contrast, the souls of those warriors who died in war are lost. They are not permitted into the same portion of the Afterworld to which other members of the populace retired; in fact, they are feared by their own people (Thwaites 1959 10:145).

According to Sempowski, on Seneca sites rattles are more often associated with female burials than with those of males (Sempowski 1986:41). Nevertheless, where mortuary evidence pertaining to gender and the inclusion of this particular type of artifact is available, parietal rattles have been exclusively linked with male burials (Sempowski et al. 2001:379; Wray et al. 1987:271, 276). The earliest recorded instance of a human parietal rattle on an Ontario archaeological site was at the late 13th-century Moatfield site near Toronto (Williamson 2007:203; Williamson & Pfeiffer 2003:46-48). Contextually, the rattle was found within a semi-subterranean sweatlodge – a structure typically associated with men (Williamson 2007:203; Williamson & Pfeiffer 2003:33-34). However, not too far away at the east end of Lake Ontario on the New York State side, modified human parietal bone was identified at the 12th-century Pillar Point

site by William A. Ritchie (Ritchie 1944:86; Wright, J.V. 2004b:1383). At the Roebuck site, a rattle was found at the bottom of a midden surrounded by five human burials: two were identified as female adults, the sex of one adult was indeterminate, and two were infants (Wintemberg 1936:5, 118-119). Rather than associate this interment with "garbage" in the modern sense of the term, it should be considered that middens could easily have been associated by Iroquoians with the concept of regeneration. As anyone who has composted can attest to, far from being sterile piles of waste, middens would have been verdant mounds overflowing with life-sustaining squash, sunflower, and other edible fruit.

The parietal rattle excavated at the Maynard-McKeown site was found within House 5.

Double Snake Burial

The fact that snakes shed their skin means that they are likewise readily associated with the theme of regeneration. Furthermore, they are special because they are liminal in that they journey between the earth and the underworld. Some even have access to water which, like reflective objects, was considered to be supernatural but most were associated with the earth (Hamell 1998:258; Mathews 1978:186; Wonderley 2005:230-231). Given the importance of rattles in Iroquoian rituals of all description, it is doubtlessly significant that rattlesnakes have their own rattle (Hamell & Fox 2005:127).

Snakes, called *undegnesy* by the St. Lawrence Iroquoians, figure prominently in many Iroquoian myths (Cook 1995:91). From giant serpents

(some horned), to battles fought with multitudes of snakes, to snakes that sought to control the minds and bodies of humans, or people who were transformed into and from snakes, serpents frequently played a nefarious role in Iroquoian tales (Curtin & Hewitt 1918:111-114, 117-118, 199, 268-270; Engelbrecht 2003:114; Judkins 2004:75 n. 3; Mathews 1978:186; Shimony 1994:162; Wonderley 2005:229-230). According to Hewitt, the term for the reptile was synonymous with that of witch and the supernatural generally (Mathews 1978:186). These attitudes are embodied by an individual named Thadoda:hǒ, described as a "'preternatural monster'...[whose] hair was of snakes, his finger ends snake heads, his forearms crooked, his body crooked in seven places, and his penis passed round his neck to reach the ground" (Fenton 1998:81). In short, he was antipodal to all that was considered good in Iroquoian society:

> The Peacemaker's message of 'peace, righteousness, and power', which together constitute the Great Law, connotes civil order. The radical nature of this message requires the presence of a counterforce connoting disorder – feud, witchcraft, and murder. The latter role is fulfilled by Thadoda:hǒ, a character whose person embodies the worst traits of Iroquois personality: fear, suspicion, wrongmindedness. These traits are symbolized by his monstrous physical features (Fenton 1998:100).

The Thunderers, seven old men with potent personal orenda (supernatural power), were associated with snakes because they were envisioned to be hunters of snakes and other vermin and, thus, human protectors (Judkins 2004:75 n. 3; Shimony 1994:162). When the Jesuits were being blamed for the illnesses decimating native populations in the 17th-century, it was speculated that they invited disease by feeding a particular snake "of which their fables make mention" (Thwaites 1959 v. 19:97). This is probably the same serpent mentioned

in a later volume of the *Jesuit Relations* where it is described as a tool of witchcraft (Thwaites 1959 v. 33:217):

> The Hurons believe that there is a kind of monstrous serpent which they call Angont, which brings with it disease, death, and almost every misfortune in the world. They say that that monster lives in subterranean places, in caverns, under a rock, in the woods, or in the mountains, but generally in the Lakes and Rivers. They say that the Sorcerers use the flesh of that frightful serpent to cause the deaths of those upon whom they cast their spells... (Ibid.).

However, not everything to do with snakes was negative. Serpent scales were said to cure toothache and the flesh to reduce fever (Thwaites 1959 v. 43:153). Reflective matter like copper, mica, quartz crystals, and shell were associated with snake scales and, among the Algonquian Lenape, it was believed that exposing a small amount of mica beside a stream would bring rain (Fox 2004:291; Hamell 1992:463 n.2; Hamell & Fox 2005:139.). This is potentially relevant because mica, although not found in great abundance, is present on most St. Lawrence Iroquoian sites and the Thunderers were, apropos their name, associated with rain. It has also been suggested that a correlation exists between snakes and cosmogony: "...snakes play a prominent role in accounting for ancestral and tribal beginnings; so much so that 'it is impossible to overstate the importance of the association of the serpent with human origins'" (Wonderley 2005:230).

In the course of a journey to the lands of the Mohawk and Oneida in 1634-1635, it is recorded that a rite was witnessed wherein a medicine-man wore a snake-skin wrapped around his head (Mathews 1981:17). This would seem to be germane to the interpretation of several effigy pipes that depict a humanoid figure

with a snake-skin-headdress (Ibid.). Likewise, it may be pertinent to the interpretation of a bone maskette excavated at the Seneca Tram site (Wray et al. 1991:59).

With respect to St. Lawrence Iroquoians, snake effigy smoking pipes are common (Mathews 1981b:40). Fragments of six were excavated at the Roebuck site, all exhibiting cross-hatching (Ibid.; Wintemberg 1936:112, 162-163). There is only one known instance, again at the Roebuck site, where it was possible to positively identify a rattle thus clearly denoting the depiction of a rattlesnake (Ibid.). A snake effigy pipe was also reported at the nearby Crystal Rock site (Pendergast 1962:29):

> The two polished brown pipe bowls decorated with a morticed crescent are particularly interesting. One is a fragment 88 mm. high with a bowl diameter of 35 mm., which represents over half the bowl. On the right-hand side of the bowl, as the smoker sees it, there is a crescent with a radius of approximately 30 mm. On this arc there are three rectangular mortice-like depressions 15 mm. long, 5 mm. wide, 3 mm. deep, and 5 mm. apart, set in an annular array. Concentric with this arc, and separated from it by a depression 5 mm. wide and 1 mm. deep, is the body of a snake effigy 7 mm. wide. The scales on the snake are represented by incised lines crossed at 1 mm. intervals. The snake's head, which tops the body looking in the same direction as the smoker, is 23 mm. long and 13 mm. thick. They eyes are round depressions 7 mm. in diameter and approximately 2 mm. deep. The remainder of the bowl (i.e., the front, left and side facing the smoker) is decorated with a continuous plat of three horizontal lines over a row of small punctate dots over five more horizontal lines, the whole framed with a border of small punctate dots (Pendergast 1962:30-31).

Particularly pertinent to the present discussion was the excavation at the Roebuck site of four effigy pipes depicting *double* snakes (Wintemberg 1936:112, 162-163). Of such images, Mathews has observed that most of the known examples have been found on sites in eastern Ontario (Mathews 1981b:40).

Curtin and Hewitt relate two Iroquoian tales involving, in one instance,

two snakes and, in another, a snake with two heads. In the first, a Ulysses-like story in which the hero must journey to a distant land whilst overcoming a series of trials, he was told that he would encounter two snakes "...which are called Osigwaon; that is, two huge Rattlesnakes, which occupy each side of the path, and which bite with deadly effect any intruder" (1918:82-84). In the latter, a boy unwisely fed a two-headed snake until it grew big enough to surround the village, eating the inhabitants as they left through the palisade gate (Curtin & Hewitt 1918:106). When all of the people, save a brother and sister, had been eaten, the brother dreamed "...that he must make a bow and arrows and take certain hairs from his sister's person and wind them around the head of each arrow; then he was to anoint the end of each arrow with blood from his sister's catamenial flow" (Ibid.).

Archaeological evidence of paired snakes was also found at the Seneca Factory Hollow site where the jaws of two serpents were excavated from a village midden (Sempowski & Saunders 2001:388). If, as suggested above, middens functioned as physical manifestations of the concept of regeneration, the occurrence of the snake jaws in this context is meaningful rather than simply an indication of disposed garbage. The probability of the former interpretation is increased by the identification of two garter snakes from a pit on the opposite side of a hearth from the House 13 nested double-pot burial (Wright, J.V., personal notes). The remains of the snakes were retrieved from the flotation of nearly twenty-seven tonnes of pit fill by Dawn and Jim Wright and the fact that neither Ostéothèque de Montréal nor Frances Stewart identified snakes elsewhere at the

site indicates one of two things: (1) normal excavation techniques, sans flotation, are not equal to the task of retrieving such bones, or (2) snakes did not occur elsewhere on the site highlighting the significance of the two that were excavated (Ostéothèque de Montréal 1989; Stewart 1999:212).

Bear Burial

According to one version of the Iroquoian creation story, it was a bear that instigated Sky Woman's fall from Sky World and, thereby, the subsequent creation of the earth itself and most of the plants and animals on it (Thwaites 1959 10:127). Such a powerful role in Iroquoian cosmogony is reflected in the attendant belief that bears had great *orenda*, that personal force that transcended natural limitations (Engelbrecht 2003:5; Parker 1989:3). Humans, who had their own orenda, could also tap into the orenda of other species and this helps to explain the role of bears in ritual (Thwaites 1959 10:209, 33:211). For example, "…according to the legend of 'The Boy and Niagwahe', the monster bear's teeth are magic and all its 'magic strength and power are his who holds these teeth', so that 'medicine men (Hotcinoga) have the teeth to this day and use them for magic'" (Fox & Molto 1994:36). Also potentially relevant is the occurrence of bear *os baculum* on Iroquoian sites; for example, two broken specimens were recorded in the Roebuck site artifact catalogue (as well as a raccoon *os baculum*) and a modified *os baculum* was excavated at the Seneca Cameron site (Canadian Museum of Civilization Archival Document 22a, File 1 Wintemberg):

> A bear *os baculum* (penis bone) had been modified…This item was originally classified as a bone harpoon in the artifact catalogue, apparently due to the

> presence of six 'barbs', arranged three to a side on one end…These 'barbs' are rounded at the edges, however, and the two that join together at the apex form a point that is very thick and blunted. While it does not seem that the barbed end could have been intended as a perforator, the other end is sharply pointed and polished, and thus not only *could*, but clearly *was*, used for that purpose. The 'barbs', then, appear to be ornamental, possibly representing the feather fletches on an arrow shaft (Wray et al. 1991:228).

Samuel de Champlain witnessed a ritual in which a medicine-man attempted to cure a patient's illness by having a large number of people dance while wearing bearskins over their heads (Biggar 1929 IV: 322-323). Several old women, likewise attired, tended to the ill person, accepting presents from the dancers on that person's behalf (Ibid.). Sagard also observed occasions when the Wendat wore "…a bear-skin covering the whole body, the ears erect on top of their head, their face covered up except for the eyes" (Wrong 1939:117). These individuals were said to be "door-keepers" and "jesters" and did not take part in the particular dance Sagard witnessed (Wrong 1939:117). It has been suggested that this latter rite might be the precursor of the modern Iroquois False Faces and Husk Faces, although Tooker states that they do not wear bearskins (Tooker 1991:78n). Regardless, there is ethnographic and historic evidence that some rites involved the imitation of bears. This was done, for example, by members of the Iroquois Bear medicine society and a medicine-man is recorded in the *Jesuit Relations* as having growled into the ears of his patients like a bear (Thwaites 1959 14:61; Tooker 1991:107). The Bear Dance is an important component of the Midwinter Ceremony (Bogaert 1988:36).

Archaeological evidence that may pertain to these rites includes the excavation of bear phalanges and teeth in two houses at the Keffer site which the

faunal analyst suggested "...may have been attached to skins which were used in the houses", modified bear jaws found near the heads of human male burials at the Adams site and may likewise have constituted bear headdresses, and effigy smoking pipes that appear to depict people wearing bear headdresses (Noble 1979:79; Mathews 1978:xiv, 330, 1981:17; Stewart 1991:39; Wray et al. 1987:44). In addition, a 1,000 year-old burial uncovered by erosion has been hypothesized to have been that of a bear shaman (Fox and Molto 1994:23). Among other things, he was found with two juvenile bear mandibles, an adult bear mandible, and four bear phalanges (Fox and Molto 1994:31):

> The drilled bear phalanges near his hands may have been part of a necklace or may even represent claws which were once attached to a bear skin garment…The bear cub mandibles may have been attached to hide medicine bundles or they may have been included with the adult mandible, antler tine, and shale item in an otter skin medicine bag, perhaps itself within a woven textile bag…The pebbles may have been contained in the type of bark rattle traditionally used by the Bear Society (Fox & Molto 1994:40).

Bear ritual also sometimes involved sacrificial feasts (Trigger 1976:41; Waugh 1916:133). Evidence of a juvenile bear sacrifice was excavated at the Nodwell site from a feature within a longhouse in which other juvenile animals had also been sacrificed (Stewart 1974:74-75). At the Wiacek site, a bear skull – again a juvenile – was found in an upright position facing east within a semi-subterranean sweat lodge situated at the north end of a longhouse (Robertson et al. 1995:49). In fact, two cases of bear ceremonialism dating to Owasco times would seem to indicate that the importance attached to this creature was long-standing and persistent (Ritchie 1950). In one instance, a tight bundle containing most of the disarticulated bones of an adult female and juvenile male bear, together with a

deer skull, were found buried in a pit near to, and similar to, pits containing two human male burials lacking accompanying artifacts (there was also a child burial but the feature was dissimilar) (Ritchie 1950:247). None of the long bones exhibited evidence of breakage for marrow extraction, a fact that Ritchie considered atypical (Ritchie 1950:247). Also, at the Owasco Carpenter Brook site:

> ...some two hundred ceramic vessels were recovered along with animal remains – predominantly bear – especially of the cranium and foot...Whole pots containing bear meat were cast into the stream...Throwing bear skulls into the water or tying them to a tree in order to protect the skulls from dogs is one way northern people show respect to the spirit of the bear (Engelbrecht 2003:12).

Figure 27: Bear effigy smoking pipe from the St. Lawrence Iroquoian Summerstown Station site.

There may have been an association between bear sacrifice and war (Engelbrecht 2003:12). For instance, when the Jesuit Isaac Jogues was captured by Iroquois warriors while en route to the lands of the Wendat, he witnessed a feast of two bears designed to propitiate the spirit of war, Aireskoi, and to atone for failure to consume captives (Thwaites 1959 39:175, 221). However, an earlier reference in the *Jesuit Relations* seems to indicate the opposite – that bears might, in fact, be associated with the hunt, but not with war. The Jesuit Lalement recorded the testimony of a man who said that, while he was on a vision quest as a young boy of fifteen or sixteen, he had been visited by a spirit who had come down to him

Figure 28: Side view of the above smoking pipe.

from the sky (Thwaites 1959 23:157). Predicting that he would live to be quite old – with hair as white as the spirit's - and have four children, three boys and a girl, the spirit then offered the boy a piece of human flesh (Thwaites 1959 23:157). When the boy turned away in revulsion, he was given a piece of bear's fat instead. From that day on, the boy had the assistance of the spirit, most notably in his health and in hunting, and, as predicted, he had three sons and one daughter. He attributed his success in the hunt to eating the bear's fat and believed that he also would have been successful in war if he had consumed the human flesh (Thwaites 1959 23:159). To further confuse the issue, the story of the death of the dog Ouatit while hunting bear is concluded when the chief said: "…and yet it would be some consolation to me now if they had brought me a little Bear, which could take his [Ouatit's] place and carry his name" (Thwaites 1959 14:35).

Both Champlain and Sagard described the raising of bears in small enclosures constructed within longhouses so that they might be fattened on sagamité (corn porridge) over the course of two or three years "without inconvenience and danger from their teeth or claws" (Biggar 1929 III:130, IV:309; Wrong 1939:220). The Dutchman Harmen Meyndertsz van den Bogaert kept a journal of the time he spent among the Oneida and Mohawk in the mid-17th-century and recorded seeing a small house "...of five steps in which a bear was being fattened. It had been in there almost three years and was so tame that it ate everything given it" (1988:6). A feature at the Kirche site has been speculated to have served in this regard (Ramsden, C. 1989:19). Likewise, an area cordoned

off as evidenced by post moulds between Houses 2 and 4 at the Maynard-McKeown site was hypothesized during excavation to have been built to contain a bear. So although as noted by Conrad Heidenreich, the Jesuits did not mention the practice of keeping bears in such a manner, there is both ethnographic and archaeological evidence that they did (Heidenreich 1971:202).

In addition, the remains of an almost complete juvenile black bear (*Ursus americanus*) were excavated from a feature inside House 16. A similar burial of a juvenile black bear was excavated at the nearby Beckstead site but, in that instance, the feature was not located inside a longhouse (D'Andrea et al. 1984: 212; Pendergast 1984:85). The bones exhibited evidence of cut marks but no long bone breakage (D'Andrea et al. 1984:212-213). Unfortunately, corresponding information for the Maynard-McKeown site was not provided in the faunal report. As was the case with the bear burial at the Beckstead site, it is probable that the Maynard-McKeown bear burial reflects a feast of bear and the subsequent careful deposition of its remains in a single feature (Wright, J.V. 2004b:1276).

Quintuple Woodchuck Burial

In the grand spectrum of Iroquoian cosmology, woodchuck or groundhog (*Marmota monax)* does not make a frequent appearance. Nevertheless, the occurrence of not just a single specimen in a feature in House 5 but, rather, *five* indicates a strong ritual association with this animal in this instance just as it does with respect to the five single-pot burials at the Bennett site and the five people buried around the human parietal rattle at the Roebuck site. This construal is

strengthened by research that indicates that the Iroquoians associated the number five with the supernatural (Wright, J.M. 1999). For example, the Jesuits recorded that, in order to become a medicine-man, a man had to fast for five days and nights in the woods (Thwaites 1959 11:265; see also Thwaites 1959 13:21, 213, 259-261, 20:169):

> Five days or some multiple of that number of days must elapse between the announcement and the taking place of a dance, a general council, a feast, etc., etc., a grain of corn being the substitute for an invitation card, because corn sprouts in five days after sowing. Five days covered the period during which boys at the age of puberty changed their voices. After five days a woman left the menstrual lodge to re-enter her home. The killer of five deer was considered very subtile and more than commonly endowed with the powers of enchantment (Hewitt 1889:166).

Generally speaking, if woodchuck is mentioned at all in the historic, ethnographic, or archaeological literature, it is as a part of a list of less interesting animals consumed by the Iroquoians or as a bioturbation factor damaging to the archaeological record (Engelbrecht 2003:12; Sempowski & Saunders 2001: 268l Wray et al. 1991:434). The only suggestion of another woodchuck burial on an Iroquoian site that could be found in the literature was at the Middle Ontario Iroquois Nodwell site in a longhouse that also contained other juvenile animal burials; however, even in this instance, the burial was interpreted as intrusive (Wright, J.V. 1974:88-89).

Beaver Burials

The beaver (*Castor Canadensis*), like the bear, also plays a role in some versions of Iroquoian cosmogony. In an alternative version of the tale already mentioned, Sky Woman's husband dreamt that, if a particular tree that bore fruit

eaten by the people of the Sky World were chopped down and he ate of its fruit, he would be cured of an illness he was then suffering (Thwaites 1959 10:127-129). Hearing of this dream, Sky Woman took her husband's axe and chopped at the tree, at which point it split apart and fell to the earth below. Sky Woman followed suit but Turtle looked up and saw the woman falling and called together the various animals to decide what should be done. Most looked to Beaver for an answer, but he deferred to Turtle (Thwaites 1959 10:129). Ultimately, they all worked together to bring up dirt from beneath the water to create an island on Turtle's back upon which Sky Woman gently landed (Thwaites 1959 10:129).

In cognizance of this, Colonel George Laidlaw identified a Wendat grey steatite effigy smoking pipe from Simcoe County in the early 20th-century as representing a beaver and speculated that it might be of mythological importance (Laidlaw 1913:12-13). Also possibly pertinent in this respect is the fact that "...confederate Iroquois law required that the national feast bowl should represent a beaver" (Parker 1916:494).

While there are numerous references in the early historic documents to the use of beaver robes as apparel "…which they wear upon their shoulders in the form of a mantle" (Thwaites 1959 15:155, 21:183; see also Biggar 1929 III:53, 371, IV:53; Wrong 1939:102) or made into moccasins (Biggar 1929 III: 132, IV:310), the most remarkable concerned their use in association with the Feast of the Dead. The women, gathering the bones of all of those who had died since the previous Feast, cleaned and wrapped them in new beaver pelts, discarding the old and worn robes that had been used during the primary burial (Thwaites 1959

10:283; Wrong 1939:211). In due course, the bundles were interred in a pit that had been lined with more beaver robes (Thwaites 1959 10:297; Wrong 1939:212):

> …they lined the bottom and sides of the pit with fine large new robes, each of ten Beaver skins, in such a way that they extended more than a foot out of it…of those twelve hundred presents that had been displayed, forty-eight robes served to line the bottom and sides of the pit; and each entire body, besides the robe in which it had been enveloped, had another one, and sometimes even two more, to cover it…for the winding sheets and shrouds are in France, Beaver robes are here (Thwaites 1959 10:297).

Even considering the fact that the beaver robes that had held the bones immediately prior to their reburial were redistributed to those in attendance, a tremendous number ended up buried (Thwaites 1959 10:301). Almost five hundred alone were used to line the pit in the instance witnessed by Brébeuf and, at "ten feet deep and five brasses wide" (Thwaites 1959 10:293), and filled to within approximately two feet of the top (Thwaites 1959 10:299), there can be little doubt that many bodies had been placed within the pit – each reported to have been interred with at least one, and sometimes two, additional robes (Thwaites 1959 10:297). Generally speaking, of course, little or no archaeological evidence of these robes would survive although one of the editor's notes to the Thwaites edition of the *Jesuit Relations* indicates that another ossuary, excavated in 1846, was over twenty feet in diameter and had "One great shroud, made of beaver-skins" (Thwaites 1959 39:265). In this instance, it is possible that the copper salts from the reported twenty-six kettles included in the ossuary helped to preserve the robes, or some portions thereof (Thwaites 1959 39:265). Another note states that, among other things, three beavers' jaws with

the teeth intact had been removed from yet another ossuary (Thwaites 1959 8:305).

The flesh, which Sagard enjoyed as he did most food, was eaten by the Wendat but the tail and the paws were preferred above all else (Wrong 1939:234; Thwaites 1959 14:271; Waugh 1916:134:). At the Wendat Kirche site:

> Most of the bones recovered from this animal (90.9%) were teeth, and 92.4% of these were incisors. This raises the question of whether beaver was a food item, or whether it was being taken for some other purpose. P. Ramsden...has suggested that this same pattern at Benson may reflect the trapping and skinning of beaver away from the village, the incisors being removed for use as chisels. It is difficult to imagine that the meat would be left behind, even if it was skins that were of primary importance. An alternative possibility is that beaver bones were not disposed of in the village, but for some reason were treated differently than most food refuse (Ramsden, C. 1989:74).

Beaver burials have been reported from Ontario sites, including the Middle Ontario Iroquois Nodwell site and the Late Ontario Iroquois Tionnontaté MacMurchy site. Apparently more than one such burial was excavated at the MacMurchy site but no details are available (Ramsden 1977:277). The beaver burial at the Nodwell site was a juvenile excavated in a longhouse (Wright, J.V. 1974:89). This burial was unusual in the sense that it was divided between two features "...located 19 feet apart, one under the eastern sleeping platform and the other in the northern cubicle, the remains of a single immature beaver were recovered – the longbones, ribs and a mandible from the southern pit and the vertebral column from the northern pit" (Ibid.). This might seem a matter of happenstance were it not for the fact that the same house had individual interments of juvenile eastern chipmunk, passenger pigeon, and black bear (Ibid.). As the author points out, faunal fragments from immature animals are a common

component of general bone refuse but the situation of individual burials described above is unique (Ibid.).

Evidence of an almost complete beaver burial was found in House 1 and a complete beaver burial was excavated from a feature in House 4. The House 4 animal is specified in the Ostéothèque faunal report as being a juvenile but corresponding information is not provided for the House 1 burial. Also unfortunate is the fact that the Ostéothèque report author(s) apparently did not realize that features were numbered by excavation square rather than by house. Consequently, although the report indicates that the House 1 beaver burial came from feature 10 and the House 4 burial from feature 3, it is difficult to pinpoint these as there are five features numbered 10 in House 1 and five features numbered 3 in House 4. Using the artifact catalogue, however, it was possible to narrow this down to three possible features in House 1 and one probable feature in House 4 on the basis of no bone or too little bone noted as having been excavated from those features.

The feature to which it is most likely that the Ostéothèque report refers with regard to the House 4 beaver burial also included a variety of other items, including vessel, pipe, lithic, and modified bone fragments in addition to a celt and a small stone bead. Two of the possible pertinent features from House 1 have small amounts of bone and general refuse. The more likely feature to have contained the beaver burial, however, produced fragmentary vessel sherds, two bone projectile points, an antler punch, carbonized plant material, charcoal, and a bone awl. Also, interspersed with the animal bone was a portion of a human

humerus which has since been repatriated (Janet Young, personal communication).

Miscellaneous

Animal Skull Burials

During excavation of the Roebuck site, Wintemberg excavated several animal skulls including specimens from two pine martens, a mink, two beavers, and a weasel (Canadian Museum of Civilization Archival Document 22a, File 1 Wintemberg). Such burials have been reported frequently in the Iroquoian literature ever since. For example, a marten skull with a hole in it was excavated at the Middle Ontario Iroquois Nodwell site, there were three separate instances of deer skulls at the Early Ontario Iroquois Bennett site, and a beaver skull was excavated at the St. Lawrence Iroquoian Beckstead site (Canadian Museum of Civilization Archival Document 1331, v.1, Beckstead site, BfFt-1, 1977; Wright, J.V. 2004b:1374; Wright & Anderson 1969:21-22). In some instances, such skulls are associated with mortuary contexts as with the excavation of a duck skull with a young adult and child burial at the Seneca Cameron site, a dog skull with an adult female burial at the Dutch Hollow site, a modified wolf skull with three children at the Dutch Hollow site, and five mountain vole skulls with an adolescent at the Tram site (Sempowski & Saunders 2001:735-736; Wray et al. 1991:430, 444). In Ontario, modified bear skulls have been excavated from the graves of an adolescent interred with an adult male and a separate adult male at the Archaic Hind site (Donaldson & Wortner 1995:15-16, 24, 81). Often, these

are interpreted as the remnants of medicine bundles and there seems to be an association at some Seneca sites between those involving mustelids and children (Sempowski & Saunders 2001:109; Wintemberg 1936:73; Wright, J.V. 2004b:1374). An alternative explanation where the skull is broken is that the brain was sought for food or for use in tanning hides (Canadian Museum of Civilization Archival Document 1331, v.1, Beckstead site, BfFt-1, 1977; Judkins 2004:153; Thomas 1998b:138).

Animal skulls excavated at the Maynard-McKeown site include a fragmented marten skull from House 8, a fragmented deer skull from House 4, and two separate fragmented beaver skull interments from House 8 (Ostéothèque 1989:11, 16).

Modified Turtle Shell

Figure 29: Drilled turtle shell from House 13.

A small piece of drilled turtle shell was found in a feature in House 13 with potsherds, a gaming disk, chipping detritus, three bone awls, a toggle-type modified deer phalange, a modified bear canine, miscellaneous modified bone fragments and bone refuse. On Seneca archaeological sites, with one exception found in a midden, such items have only been recovered from mortuary contexts (Sempowski & Saunders 2001:380-381). The presence of the drilled hole, similar to those that may be observed on complete turtle shell rattles or human parietal rattles, caused the report author's to conclude that it was part of a rattle (Ibid.). In Ontario, however, drilled turtle

shell has been reported at the Middle Ontario Iroquois Uren site and, in fact, "from all stages and branches of the Ontario Iroquoian Tradition" and at such St. Lawrence Iroquoian sites as Roebuck (Pearce 2005:100-101; Wintemberg 1928:34, 95, 1936:20). As discussed in an earlier section in this chapter, rattles played a significant role in Iroquoian ritual.

The use of turtle shell in rattle construction was a reflection of the veneration of the Iroquoians toward these animals because Turtle supported the earth on his back, Turtle Island, and fathered the good twin who created much of the earth's animal and plant life (Hale 1888; Pearce 2005:88-89). Like snakes, turtles can be considered liminal in that they can exist both on land and in the water. Consequently, it may also be significant that a large, albeit unmodified, piece of Blanding's turtle shell was excavated from House 17 (Ostéothèque de Montréal 1989:20). This is supported by the fact that unmodified turtle shell has been found in mortuary contexts (Ibid.). Specifically, Blanding's turtle was associated with a cremation deposit of at least seven people and a burial of a man, woman, and an individual of indeterminate sex (Donaldson & Wortner 1995:10).

Figure 30: Unmodified Blanding's turtle shell from House 17.

Wampum

In 1957, Jim Pendergast deposited a handful of artifacts in the collections of the Canadian Museum of Civilization from what was then known as the Maynard site. While the records on file do not indicate how these items came into his possession, they do specify that they were from the Concession 3 property

(Canadian Museum of Civilization Accession Record 1271). In all probability, the landowner or another local resident gave them to him.

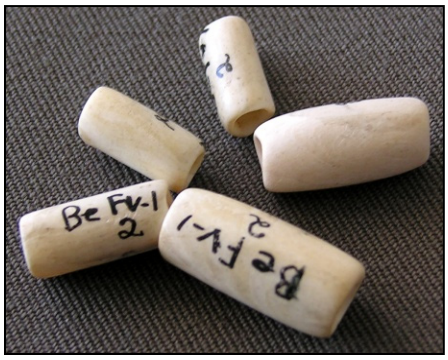


Figure 31: Tubular shell beads from what was probably the village cemetery.

As previously mentioned, most of the village was situated on the Concession 2 property with only a small portion overlapping onto Concession 3 land. This is significant, because when Wintemberg visited the site in 1914, his observations were recorded as pertaining to Concession 3. On July 20th, 1914, he wrote:

> Mr. Robert Simpson presented for the museum one bone awl, and three soapstone beads, which he found there. I found a few pottery fragments and the broken stem of a pottery pipe. Mr. Simpson told me that chipped stone points for arrows were formerly fairly numerous. He has a portrait pipe made of pottery which resembles some found at Roebuck. *He also found many cylindrical beads made from the columellae of large sea shells*. Bone awls and pottery were formerly common and pipe fragments also. Several human skeletons were found while digging the foundation of the barn. Some were also found while digging the cistern, trenches and while ploughing. One skeleton, of which I secured the skull, had been pitched head first into a deep hole and covered up (Canadian Museum of Civlization Archival Document Box 126, File 2, Wintemberg).

Although exhumation of burials was not permitted during the 1987 excavation of the site, there was considerable discussion at the time regarding the possible location of an associated village cemetery. Given Wintemberg's testimony, it would appear likely that it was situated almost half a kilometre from the village on the Concession 3 property, a distance corresponding with a St. Lawrence Iroquoian village and cemetery located in New York State although a mere four metres separated the Mandeville village and cemetery (Abel 2001:83;

Chapdelaine 1990:57). His reference to "many cylindrical beads made from the columellae of large sea shells" is supported by five such beads Pendergast deposited in the Museum collections in 1957. Since he did not mention the beads in his 1989 paper, "The Significance of Some Shell Excavated on Iroquoian Archaeological Sites in Ontario", published as part of the proceedings of a conference exclusively on shell beads, it is probable that he had simply forgotten about them.

Figure 32: The path the excavator's walked from the probable Maynard-McKeown cemetery to the village. Appropriately, the journey took place, in the past as in the present, through a corn field.

Rediscovered by the author, these beads have since been identified as marine whelk and, tentatively, as *Busycon canaliculatum* (Matthew Betts, personal communication). No such beads were excavated within the village although the possibility exists that they were associated with the human burials that were not excavated. Such was the case at the nearby Beckstead site where a single tubular marine shell bead was found in association with a child burial in a longhouse (Pendergast 1984: 76, 198-199).

Figure 33: The barn to which Wintemberg referred.

As a result, there is good reason to believe that the Maynard-McKeown cemetery was situated on a small hillock within view of the village. For those who are inclined to perceive a certain poignancy in the continuity (rather than the starting and stopping) of human existence, it is notable that the excavators of the village site ate, socialized, and slept not just figuratively, but literally, in the arms of the ancestors. In this, they emulated W. J. Wintemberg who lived in a tent erected in the midst of the human burials at the Roebuck site during its excavation (Wintemberg 1918:155).

Figure 34: The excavator's camp on the other side of the barn.

The small iron awl mentioned previously as the sole extant evidence on *any* St. Lawrence Iroquoian site of contact with Europeans is a clear indication that the village's inhabitants were involved in trade. It is emphasized that this awl was recovered from a defensive trench uncontaminated with uncarbonized wood or more recent (e.g. European) artifacts (Wright, J.V. & Wright, D.M. 1990:4; Wright, J.V. personal notes). Unfortunately, although it is known that the shell beads came from the Concession 3 property, their exact provenience is unknown. However, it is probable that they were originally associated with a human interment as: (1) Wintemberg reported burials from the same property that produced the beads, (2) there is a precedent for the association of wampum with burials at the nearby Beckstead site and other Iroquoian sites, and (3) no shell

beads were excavated in non-mortuary contexts in the village. Like the iron awl, the beads offer some insight into the extent of the community's trade network.

In Cartier's description of his encounters with St. Lawrence Iroquoians, he noted the value that they placed on shell beads called *esnoguy*:

> The most precious article they possess in this world is *esnoguy*, which is as white as snow. They produce it from shells in the river in the following manner. When a man has incurred the death penalty or they have taken some prisoners in war, they kill one and make great incisions in his buttocks and thighs, and about his legs, arms, and shoulders. Then at the spot where this *esnoguy* is found, they sink the body to the bottom and leave it there for ten or twelve hours. It is then brought to the surface; and in the above-mentioned cuts and incisions they find these shells, of which they make a sort of bead, which has the same use among them as gold and silver with us, for they consider it the most valuable article in the world (Cook 1995:62).

While the reference to the significance of shell beads to Iroquoians is borne out by an abundance of corroborative archaeological, historic, and ethnographic evidence, the method of shell procurement described was clearly a joke and, perhaps, a not-so-veiled warning of the dire consequences suffered by those who were enemies of the St. Lawrence Iroquoians. The humour of native people in the Age of Exploration is well-known (Wright, J.M. 2002).

On the basis of Cartier's log, therefore, it has been assumed that the shell in question is freshwater (Biggar 1924:158-160). While it is true that freshwater shell beads have been found on St. Lawrence Iroquoian sites, the beads in question from the Maynard-McKeown site were crafted from saltwater

Figure 35: Marine shell beads from the Maynard-McKeown site.

shell and are, therefore, special. It has been reported that, of all of the known St. Lawrence Iroquoian sites, such beads have only been found on the Mandeville (Quebec), Roebuck (Ontario), Beckstead (Ontario), Durfee (New York), Place Royale (Quebec) and, possibly, Heath (New York) sites (Clermont & Chapdelaine 1992; Pendergast 1989:99; Tremblay 2006:79; Wright, J.V. 1987). To this list should be added the beads from the Maynard-McKeown site and a bead from an island near Brockville, Ontario: "Two flexed skeletons, facing each other, were discovered 'under four feet of sand resting on a floor of clay...' A number of copper beads and a bead made from a small ocean shell were found 'in a heap under three flat stones placed on edge, and converging at the top'" (Wintemberg 1928b:178). It may simply be that the seeming rarity of these beads on St. Lawrence Iroquoian sites reflects their customary association with mortuary contexts of which there is little information available. This seems to be an appropriate explanation for the absence of shell beads on archaeological sites that are historically reported to have had large quantities of them (Trigger 1985:105).

Figure 36: Illustration of the bores of the Maynard-McKeown marine shell beads.

Lynn Ceci conducted a mammoth study of shell beads from seventy-one archaeological sites in western New York State (Iroquoian) and coastal New York State (Algonquian) (1989). According to the taxonomy that resulted from her research, the Maynard-McKeown shell beads are not what she termed Classic Wampum. To be categorized thus, they would need to conform

to the following:

> 1) species – white beads sliced from narrow columellas of two small whelks (*Busycon canaliculatum, B. carica*), gastropods especially abundant in coastal New York; purple beads from the hard-shell clam (*Mercenaria mercenaria*) a bivalve more widely distributed along the Atlantic Coast; 2) shape – tubular, smooth, well-finished; and 3) size – average diameter 4 mm, length 5.5mm, bore 1mm (Ceci 1989:63).

Since, as can be seen in Table 3, the Maynard-McKeown shell beads are larger, Ceci would classify them as Early Wampum which, in addition to being larger, have smaller, often straight, "metal-drilled" bores than Proto-Wampum (Ceci 1989:72). As can be seen in Figure 36, the bores of the Maynard-McKeown beads are consistent through the length of the bead. However, it should be mentioned that iron awls would not necessarily be required to accomplish this. As Slotkin and Schmitt have observed, Iroquoians were creating bores in stone smoking pipes and other mediums harder than shell long before iron became available (1949:225). For example, several stone beads with small bores were excavated at the Maynard-McKeown site, as they have been from many Iroquoian sites. On the other hand, James Bradley asserts that "the pre-contact manner" of shell bead crafting involved "a tapering perforation from either end" (1987:225 n. 27).

Figure 37: House 5 lithic bead.

Bead	Length	Diameter	Bore Diameter
#1	9.67mm	4.96mm	2.59mm
#2	15.72mm	5.88mm	3.55mm
#3	10.40mm	5.58mm	2.53mm
#4	12.15mm	5.33mm	2.83mm
#5	13.92mm	6.44mm	3.67mm

Table 3: Shell bead measurements.

Speaking of his time among the Iroquoian Wendat confederacy (1623-1624), Gabriel Sagard said of their *Onocoirota* (shell beads): It "consists of the ribs of those large sea-shells called vignols, like periwinkles, which they cut into a thousand pieces, then polish them on sand-stone, pierce a hole in them, and make necklaces and bracelets of them, with great trouble and labour on account of the hardness of these ribs..." (1939:146). The significance of this statement is that the Wendat of Sagard's acquaintance apparently were not importing *beads* but, rather, the raw material from which they were made. Therefore, the small iron awl found at the Maynard-McKeown site could have been used in the crafting of the shell beads that Pendergast deposited in the Museum collections in 1957. Certainly, it is of a size and shape comparable to chert drills used for the same purpose by Incan craftsmen (Mester 1989:160, fig.5).

According to Fenton:

> ...the first 'proto-wampum' to meet [Ceci's criteria for "true wampum"]...comes from Middle and Late Woodland sites (ca. A.D. 200-1510). The latter beads are significantly larger, as are the stone-drilled bores. Ceci found comparable materials on coastal sites of similar dates. There was evidently a trade network in shell beads already established before the first European landfalls (1998:226).

It has been speculated that, rather than the more potentially dangerous ocean route, the material for these saltwater shell beads would have traveled via the Hudson River from the Atlantic Ocean (Fenton 1998:224-225; Pendergast 1989:101; Trigger 1985:105). Most modern North Americans probably do not truly appreciate the value of the many lakes, rivers, and even creeks of this land. In the past, however, they would have provided a rich source of food and, perhaps even more importantly, thoroughfares to regions that might have been inaccessible, or nearly so, by land. With respect to the St. Lawrence Iroquoians, it is known that the eastern members of this probable tribal confederacy used the St. Lawrence River to travel as far as the Baie de Gaspé. Even the western members travelled great distances as evidenced by the presence of seal bone on the Roebuck site (Wintemberg 1936:14). Likewise, one has only to look at a map to see the complex network of rivers and lakes and know that, starting with the Richelieu River, it was certainly possible to use the inland waterways to journey great distances south to those areas where material for the shell beads they valued or the beads themselves could be procured. Another possibility is the Susquehanna River and its tributaries (Hamell 1992:458). Even in the vicinity of the Maynard-McKeown site, St. Lawrence Iroquoians could have accessed the Oswegatchie River at present-day Ogdensburg, New York, and voyaged south from there. This route is not as clear on maps as the Richelieu River route, and perhaps would not have taken them quite so far south, but satellite images demonstrate its viability, a circumstance that would have been all the more valued if it involved fewer rapid-bypassing portages.

While European merchants in the Age of Exploration viewed wampum as a sort of pre-existing local currency with which to trade for the items they valued, the actual worth of these beads is best assessed within the context of Iroquoian cosmology (Bradley 1987:179; Fenton 1998:7, 224). Wampum figured prominently in several Iroquoian myths, the most obvious being those concerning the formation of the League of the Iroquois. In ritual, wampum performed a central role in the Condolence ritual, the purpose of which was to ease mourning, and in the regenerative Requickening Rite (Engelbrecht 2003:132; Hall 1997:35):

> One of the most provocative comments that I have found on the requickening aspect of the Condolence ceremony is that made by the Tuscarora anthropologist J.N.B. Hewitt, to the effect that the Requickening Address details the calamitous effects of death on the health and welfare of the whole 'mourning sisterhood of tribes' and that 'it [the Requickening Address] counteracts these evils and restores to life the dying people in the person of their newly installed chief (Hall 1997:35).

This contrastive mourning/regenerative characteristic of shell beads may also be reflected in the use of shell as knives for scalping (Wintemberg 1907:42). The ideological basis of Iroquoian warfare, which so closely tied the torture and sacrifice or adoption of enemies with social regeneration, may have viewed as appropriate the dualistic meaning of shell in the context of war as it did in less offensive circumstances.

As a final comment on Iroquoian use of wampum, it has been asserted that the purple (sometimes called black) wampum probably did not come into use until sometime after European contact; however, the presence of quahog (*Venus mercenaria*) shell (from which such beads were made), albeit unworked, at the 15th-century Roebuck site suggests that the significance of this shell in fact

*pre*dated the contact period (Hamell 1992:460; Wintemberg 1936:22). It is difficult to imagine it traveling such a great distance if there was not some sort of meaning attached to it.

Lars Fogelin has made two observations that are of particular relevance to this chapter: (1) that belief systems are not simply an occupation of the mind but, rather, involve action and, (2) that religious *behaviour* – like all other forms of human activity – has the potential to leave material traces (2008:131, 133). The archaeological features described in this chapter are testaments to such past actions and, correspondingly, to the motivations behind them. To begin to appreciate these impetuses, however, requires both an understanding of context and potential forms of ritual expression. In the first instance, it is unfortunate that much early Iroquoian archaeology emphasized discrete artifacts independent of provenience and associated material culture. This is not true of recent excavations but, nevertheless, the bulk of archaeological data pre-dates these with the result that most available data are unprovenienced at the intra-site level. In the second instance, examples were provided in this chapter of analysts who failed to distinguish potentially significant faunal elements such as bear and racoon *os baculum* and have (probably) consolidated ritualistic pot burials with general ceramic vessel fragments. The consequence of these short-comings is that evidence of ritual activity is being disregarded on Iroquoian sites. The Maynard-McKeown site actually produced another example of this in the form of what may have been part of a medicine bundle containing the jaws and paws of a *mustelid*

excavated at the bottom of a very large, otherwise empty, feature. Unfortunately, these bones were subsumed within the larger faunal category from the site with the result that, without reanalysis of the entire faunal collection, it is now impossible to identify this feature. In part, this impediment to our understanding of past ritual at the site is also attributable to feature forms that were created at a time that coincided with the advent of computer use in the context of archaeological data collection and analysis. Enthralled with the potential of computers, an over-emphasis on numerical data was common. In retrospect, an equal emphasis should have been placed on textual observations but, in fact, only a miniscule space was provided for such comments on the feature form used at the site. Whatever the reasons, the failure to recognize ritual behaviour impacts not just an understanding of these activities at discrete sites but, also, at larger scales of analysis within Iroquoia. This is because much ritual is not practiced on a daily basis; therefore, in order to identify patterns of ritual practice, it is necessary to look beyond individual sites to identify similar features elsewhere and, thus, attempt to infer meaning from corollaries in the contextual data. It is this archaeological context, plus insights derived from history and ethnography, that offer the possibility of approaching an understanding of past ritual.

CHAPTER FOUR: CLANNISH TENDENCIES

Iroquoianists have long known that ceramic vessels, the most common artifact class to survive the destructive tendencies of time, can be used to distinguish in broad terms social groups within Iroquoia (Tuck 1971:18). Richard S. MacNeish's *Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory*, based on only a fraction of the material culture data available today and riddled with much to concern the modern investigator, nevertheless effectively identified attribute combinations clustered in space that apparently reflect past social groups on a par with tribes and tribal confederacies (1952; Wright, J.M. 2006:45-48). The success of these attribute combination identifications is demonstrated by the fact that they are still in common use more than half a century after their creation.

All classification schemes are created for a specific purpose or risk serving none (Adams & Adams 1991:45, 68; Ford 1954:42). As Rouse has observed "[It] is not an end in itself but a technique by means of which to attain specified objectives, and so it must be varied with the objective" (1960:313). The expressed goal of MacNeish's typology was to demonstrate the *in situ* development of the Iroquoian people (1952). Consequently, the attribute combinations he selected were those perceived as operating at a spatial level encompassing all of Iroquoia (1952: 1-2; see also Ritchie & MacNeish 1949:98). However, presented with a tool that facilitated both scholarly communication and sorting consistency, many archaeologists have since attempted to use it to compare intra-tribal/intra-confederacy site collections. This practice has been premised upon the hypothesis that degree of similarity between such collections

corresponds to the past degree of relationship between members of these communities (Kuhn 1985:3; Whallon 1968:223). It is generally accepted that women in close contact, and particularly those residing in a matrilocal society, shared pottery making tips and participated in design trends that resulted in a greater homogeneity between their pots than those with whom they had infrequent or no contact (Berres 2001:8; Whallon 1968:224, 227, 229, 236).

This unintended use of MacNeish's pottery types is further exacerbated by two potentially significant, yet seldom considered, variables. The first concerns the presence of foreign pottery in site collections. It is known from historic documents that warring Iroquoian tribes customarily sacrificed male enemies while adopting women and children (Trigger 1985:97; Wrong 1939:159). Archaeological evidence of pottery on sites of styles different from the larger social group supports the presence of women making foreign style pots and the fact that trace element analysis has indicated that these vessels are constructed from local clays negates the possibility that they were acquired through trade (Kuhn 2004; Trigger et al. 1980; Wright, J.M. 2006:57). While many scholars note the presence of such pottery in site collections, they generally choose to incorporate what should be a separate category with the rest of the collection for comparison with other site collections. The result of this practice is that, although insight into relationships with other communities is sought, quite frequently what is really measured is the degree to which respective settlements were involved in warfare (Wright, J.M. 2006). For instance, the Wendat Waupoos site collection contains more than fifty percent foreign pottery and comparing this to a village

collection with either more or less foreign ware would suggest a potentially inaccurate degree of isolation as, in fact, would the comparison of collections comprised of different foreign ware make-ups (e.g. variable ratios of pottery reflecting styles characteristic of different social groups) (Wright 2006:57).

Second, many researchers have tended to assume that the village constituted a basic unit in Iroquoian society. To modern eyes, this appears reasonable as villages are distinct bounded physical constructions isolatable in both space and time. Furthermore, as noted previously, individuals in close contact are generally expected to have shared a high degree of relationship. Both of these factors have premised research concerning the tracking of what are perceived as distinct communities through time and multiple short-distance relocations as resource-depleted locales were abandoned in favour of more resource-rich areas, a phenomenon duly recorded in the historic literature (e.g. Thwaites 1959 10:275; Wrong 1939:92). However, introducing a confounding factor to such research are other historical documents that record the presence of clan segments in villages, segments that the documents indicate sometimes chose – as discrete units – to leave one village in order to join another (Fenton 1998:24; Trigger 1969:55, 1976:56): "They increase or diminish their numbers, however, by the adoption of other families [clans], who join themselves now to some, now to others, and who also sometimes withdraw to form a band and a nation by themselves" (Thwaites 1959 16:227). Therefore, *if* local level social groups like clans differentiated their pottery stylistically as was apparently the case at the tribal/tribal confederacy level, village site collections representing two or more

past clan segments are not comparable as they do not constitute the most basic unit of analysis. Relationships between settlements can hardly be assessed from a conglomeration of styles peculiar to changeable compositions of clan segments.

In his work among the Puebloan peoples of the Southwestern United States, Wesley Bernardini noted that:

> In contrast to archaeologists, many of the indigenous groups whose history or prehistory has been parsed into culture areas are themselves 'splitters' when it comes to cultural identity. For them, the meaningful emic scale of social identity is often rather small, at the level of a lineage or clan (ca. 15-50 people). Only under certain circumstances is identity at larger scales activated...One Hopi man put it this way: 'First, I am a Kyarswungwa (Parrot clan member), then I'm an Oraibi, then I'm a Hopi'...reflecting levels of identity at the clan, village, and tribal levels (2005:33).

Unfortunately, a similar quotation is not available from a past Iroquoian; however, the predominance of the clan system in Iroquoian society is clearly discernable in the fact that each individual was born, named, sheltered (if they were women) and cared for in death under the aegis of their clan (Fenton 1978; Fenton & Moore 1974 I:71; Goldenweiser 1967; Tooker 1984:112; Trigger 1976:54). Marriage was exogamous and each clan segment had its own civil and war chief (Goldenweiser 1967; Tooker 1984:111; Trigger 1976:55): "In the large Villages there will be sometimes several Captains, both of administration and of war, who divide among them the families of the Village as into so many Captaincies" (Thwaites 1959 10:231; see also Wrong 1939:149). With respect to the League of the Iroquois, it has been observed that the interweaving of clans through the member tribes of the Confederacy constituted the "life and strength" of the alliance (Judkins 2004:57; Tooker 1970:93). Visitors distant from their own homes could always count on a hospitable reception in a longhouse

belonging to their clan even if it was in another settlement where they did not know anyone, thus providing a literal sense of kinship between communities whose members were *not* in frequent contact (Fenton 1998:24, 102; Tooker 1984: 111; Trigger 1976:54). Such clan dwellings were likely readily identified by the clan totems painted on them (Fenton 1998:24; Thwaites 1959 10:47, 15:181; Wrong 1939:98; William Engelbrecht and William C. Noble cited in Warrick 1984:20). Also:

> Among the Iroquois, the land used by the women was also owned by women (the matrilineage). This included agricultural land and land on which berries, nuts, roots, bark, and medicines were collected. They also owned the house and the burial grounds...These principles of land ownership are illustrated in the manner of indicating the ownership of melons planted in patches in the woods which had been cleared by burning. The ownership of the patch was indicated by a pole painted with the clan totem...The clan totem indicated that the patch belonged to the clan and that, if necessary, any clansmen might take the fruit... (Tooker 1991:60 n. 93).

Archaeologists have long speculated that intra-village settlement pattern evidence of clusters of differently oriented longhouses reflect the presence of clan segments on sites. Testing such a hypothesis requires the exposure of all, or at least many, of the longhouses at a site in order to compare and contrast their associated contents. Unfortunately, much of the database available to Iroquoianists is the product of limited excavation, either due to insufficient funding or salvage priorities, or of the efforts of collectors seeking objects while ignoring provenience. Conservation-minded individuals, presuming that more sophisticated research tools will be available in the future, advocate the so called sampling of sites in order to preserve the rest for future archaeologists. However, knowledge cannot advance in the interim if larger-scale research interests, such as

the potential identification of clan longhouses, are not pursued. In fact, if clan longhouses *can* be distinguished by their associated material culture (and keeping in mind the changeability of intra-community clan segment habitation), the past presupposition that site samples are random and, therefore, representative of the entire site, is false:

> The time to be most concerned with the representativeness of a sample is during excavation. And while doubtlessly the task of scholars would be much simpler if it could be blithely assumed that ceramic types were randomly distributed across archaeological sites, making any sample of sufficient size taken from anywhere on a site representative, the fact that researchers study patterns of past human behaviour demonstrates that this is unrealistic. For example, 77% of all St. Lawrence Iroquoian pottery vessels from the Southern Division Parsons site were 'from the extreme east side of the site'...If only this portion of the site had been excavated, the resulting interpretations would reflect this biased sample. Even if this section of the site were excavated in addition to an equivalent-sized section, the potential still exists for bias in the resulting interpretations (Wright, J.M. 2006:49).

Fortunately, in the last few decades, a few Iroquoian sites have been largely or even completely excavated and at least two of these have been examined for evidence of clan longhouses. The first is the Nodwell site, a mid-14th-century palisaded village located in what is now Port Elgin, Ontario (Wright, J.V. 1974). No evidence of clans was discerned but longhouses were perceived on the basis of their associated ceramics to be progressive or conservative. This does not mean that ceramic vessels do not signify clan membership as they do tribal or tribal confederacy affiliation; rather, it may simply be that the attributes this particular researcher selected for study do not denote clan membership. At the early 16th-century Mandeville site, Claude Chapdelaine attempted similar intra-site contextual analysis "...and found a very homogeneous pattern between

the different sectors of the site. The explanation is probably to be found in the small size of the village" (Chapdelaine 1990:58).

Another type of Iroquoian social group operating at the local level are moieties. Among later Iroquoians, it has been observed that "One moiety is complementary to the other, and all action is reciprocal" (Shimony 1994:47; see also Fenton 1998:26). A palisade bisecting the 17th-century Wendat Ball site has been speculated to signify the presence of moieties and the Owasco Kelso site "included two intersecting but obviously distinct villages" (Knight 1987:187; Ritchie & Funk 1973:167). In fact, two St. Lawrence Iroquoian sites in the Prescott cluster, the Cleary and 27/VII sites, may reflect a similar situation. Both were subjected to limited examination by Bruce Jamieson in 1979 that determined that they were both village sites and that they were situated *less than* one quarter of a mile apart, much like the Neutral John Donovan and Clarence Smith sites respectively situated five hundred metres from the Frog Pond site (Bursey 2006:4; Jamieson 1980 Canadian Museum of Civilization Archival Document No. 88-2973). Although Jamieson stated that the ceramics from both settlements were coeval with the nearby Roebuck and McIvor sites, he nevertheless interpreted the proximity of the sites as indicative of a lack of contemporaneity (1980 Canadian Museum of Civilization Archival Document No. 88-2973). Given that the St. Lawrence Iroquoians only populated this region in the early fifteenth century and disappeared by the late sixteenth century, it is improbable that local resources could have recovered sufficiently from inhabitation by one settlement to permit resettlement by another (Pendergast 1996:57; Wright, J.V. 2004b:1236-1237).

Even considering that the St. Lawrence Iroquoians used specific criteria in the selection of the sites upon which they decided to settle, such as nearness to resource-rich swamps and distance from the St. Lawrence River, there would have been an abundance of other appropriate sites upon which to build (Engelbrecht et al. 1990; Pendergast 1990:20-22; Wright, J.V. 2004b:1259). Instead, it is hypothesized that the two settlements were, in fact, coeval and that they represent the physical separation of distinct social groups like moieties. This is in accord with oral traditions that moieties originated as communities divided to some limited extent, as by a stream or a lake, and historic reference to a Wendat town called Kninonascarant comprised of three closely situated hamlets (Engelbrecht 2003:108; Thwaites 1959 13:125; Trigger 1976:55).

Further afield, other scholars have also sought archaeological evidence of local level social groups like clans and moieties. Despite some inadequacies with regard to method and premises that cast doubt on the resulting interpretations, these studies nevertheless are useful because they illustrate some of the pitfalls associated with attempts to discern relationships between archaeological evidence and the past existence of local level social groups.

First, good results can never be attained from compromised data. Longacre's sample of 15,000 sherds was acquired via surface collection and the excavation of two sites (1970:28). He acknowledged that the procedures used to obtain this sample were poor, that the sample was unrepresentative, but imagined that further statistical wrangling – making so-called "allowances" for the

deficiency – solved the problem (Longacre 1970:34). As Stephen Plog has observed:

> Many...studies seem to assume implicitly that all sample-size variation is an artificial product of research and excavation strategies, not a result of the variation of prehistoric human behaviour that is the focus of our research. The resulting manipulation of sample size and richness values unfortunately may be obscuring these behavioural factors that also can be important sources of sample-size variation, factors that could be integral to specific research questions (1993:490).

Robert Whallon's data were likewise inadequate to the task because they were premised on Iroquoian site collections obtained via partial site excavations, many of which focused on artifact-rich middens, or selectively acquired amateur collections subsequently donated to research institutions. As Trigger noted, the emphasis on data derived from "...contexts of disposal rather than use severely limits their utility" (Ibid.). Also, as his study examined collections representing different temporal periods, it is inappropriate that the different periods were disproportionately represented (Kuhn 1985:29).

Second, archaeology is a pursuit by human beings of one era of understanding the limited evidence that remains of humans of other eras. It is not a natural or physical science but, with the addition of the complicating variable of culture, something far more complex. Hence, precepts borrowed from disciplines other than those involving humans are inadequate and misleading. Unfortunately, in his Broken K Pueblo study, James Hill chose to make use of biological concepts like genetic drift, based his research on the notion that the data signified "adaptive changes in response to causal forces" without even entertaining the possibility of other types of cultural impetuses, and considered the potential

impact of environmental influences to the exclusion of social factors (1970:15, 17).

Third, Hill quite appropriately emphasized the need for classification and acknowledged the importance of devising taxonomic systems peculiar to the research at hand (1970:17). The problem with the type approach as it is frequently applied at the local level, however, is that it emphasizes *popular* combinations of ceramic attributes when it is quite probable that the combinations used by local level social groups do not occur frequently because there are fewer participants in such design trends. Unfortunately, believing he was improving the integrity of his sample, Hill chose to disregard those of his ceramic types represented by frequencies of less than twenty-five (1970:24-25). Similarly, his use of factor analysis which he described as "a tool useful in discovering relationships among more than two variables" indicates that he did not consider the possibility that single attributes might have operated at the local level (Hill 1970:24).

Returning to the Iroquoians, Robert Whallon noted a degree of homogeneity in data associated with matrilocal residence patterns that he did not observe in data related to non-matrilocal communities (1968:228). He concluded that: "The high degrees of attribute association present in the Iroquois assemblages are congruent with Deetz's hypothesis in that matrilineages, residing together in one or more longhouses, were the basic social units in an Iroquois village" (1968:240). Likewise, Hetty Jo Brumbach, utilizing data from two longhouses from the late 16th-century to early 17th-century Mohawk Smith

(Pagerie) site, identified intra-house homogeneity but interpreted this as "compatible with a preferred, but not necessarily prescribed, matrilocal rule of post-marital residence" (1985:341, 344). This latter point is significant because it helps to account for previously voiced concerns regarding hereditary Iroquoian chiefs who resided in clan dwellings despite exogamy rules that would customarily require them to live in the longhouses of their wives (Trigger 1981:7). It also reflects Hill's apposite observation that patterns discerned in research of this nature should not be expected to be absolute but, rather, simply exhibit "less social distance within each of the units than between them" (1970:69).

Decorative Ceramic Vessel Attributes and Longhouse Context

Figure 38: Juvenile vessel from House 1

Despite Jim Pendergast's belief that clusters of longhouses at St. Lawrence Iroquoian sites in the Prescott cluster like Maynard-McKeown, Roebuck, Beckstead, and McIvor, were situated "to economize on the movement of building material and to facilitate their construction", it was hypothesized in the present study that they reflect the past presence of social groups like clans and moieties (1990:23). In order to assess this hypothesis, it was necessary to: (1) collect decorative and provenience data for each intra-house rimsherd. Unfortunately, a number of items from the Maynard-McKeown site, including pottery rims, had been incorporated into two separate traveling museum exhibits

and were, therefore, unavailable for analysis. Nevertheless, it was possible to acquire some of the data relevant to these items from photographs and extant records; (2) determine which rimsherds comprised discrete vessels. The process by which this was accomplished was described in Chapter Two and was much facilitated by the mending of rim fragments by Jim Pendergast and the post-excavation assistants he hired; and, (3) create a notation system by which the decorative attributes of each vessel could be condensed and, thus, more readily compared between longhouses.

The following were excluded from the analysis: (1) rimsherds from features in areas where longhouses overlapped as a result of rebuilding because of the uncertainty involved in determining their original house association; (2) rimsherds from the two sweatlodges because they were not dwellings, and (3) rimsherds from vessels constructed by juveniles because their decoration is generally atypical of that done by adults.

With specific regard to the decorative attributes concerned, it was decided to treat the ////, ||||, or \\\\ that so often comprise a portion of Iroquoian ceramic vessel motifs as a single attribute because it was observed that the relative angle or verticality sometimes varies even on the same rim fragment. This being the case, it was reasoned that any potential meaning associated with the attribute was not contingent upon its relative position. Other attributes, like castellations, were excluded because their occurrence on rimsherds is inconstant, thus precluding the expectation that they are meaningful with respect to the goal of this portion of the

study. Instead, all effort was focused upon interior, lip, and exterior rim decorative attributes.

Another reasoned supposition of this phase of the study was that, if ceramic vessel motifs have meaning, there is probably some significance attached to the *order* in which attributes are arranged on a rim. In other words, just as that other physical manifestation of meaning, ritual, is comprised of ordered and contextualized sequences of behaviour so, too, is it hypothesized that the significance of graphic symbols resides in their spatial arrangement in themselves and with relation to other symbols. A precedent for this expectation with respect to Iroquoian material culture can be found with a motif variously found decorating silverwork and beaded clothing. At once signifying the celestial tree, these curved tendrils (which resemble fiddleheads) connote sleep or death when curled *inwards* (Parker 1912:613-615). Another example is a "Record staff containing the history of a condolence and raising ceremony of a royaneh or councellor" (Fenton 1968:110-113). In this instance, a series of eighteen abstract (e.g. several vertical lines) and iconographic (e.g. stick men in various postures) graphic symbols convey meaning only when viewed in order from the top of the staff to the bottom (Ibid.).

The notation system created specifically to address the identification of clan specific vessel attributes or motifs thus emphasized the relative arrangement of decorative attributes. Letters were substituted for visual depictions of the attributes themselves because they were found to be less visually distracting. In this respect, they are like the letters assigned to DNA base chromosomes which,

similarly, serve to simplify data for analysis while retaining all relevant information (Gutteridge 1983:209).

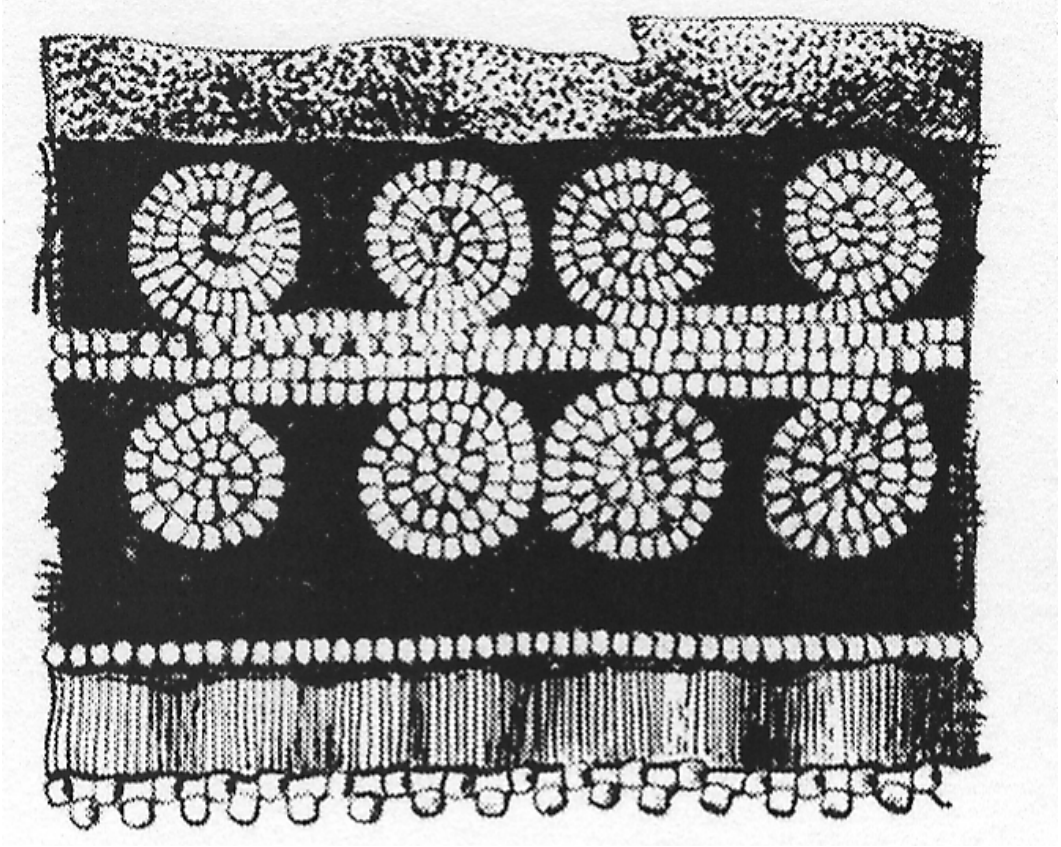


Figure 39: When curved inward, this decorative attribute - shown here on a legging - symbolizes sleep or death. From Parker 1912.

Further simplification was imposed by ordering the described motifs according, first, to the number of exterior attributes, second, to the alphabetic attribute assignment, and, third, to the presence of interior and lip decoration (followed sequentially by rims with interior, but no lip, decoration; rims with lip but no interior decoration; and rims with no interior or lip decoration). A dash, like those used in telephone numbers, was used to separate interior, lip, and exterior attributes. A slash (/) was used to convey the fact that no decoration was found in one or more of these three spatial zones. For example, and remembering

that \\\\, ||||, and //// were treated as a single attribute, the decoration of a rim described as A-/-D is translated as \\\\ or |||| or //// in the vessel interior, no attribute on the lip, and horizontal line(s) on the exterior. Since past research has demonstrated the past significance of number symbolism in Iroquoian society (Hewitt 1889; Wright 1999), the number of horizontal lines apparent on a rimsherd was noted in brackets beside the frequency of this specific motif as it was observed in particular house structures. In some cases, the same motif was found on several rims in a longhouse but with differing numbers of horizontal lines. In these instances, the differences were recorded. For example, "3(1-5; 1-7; 1-10)" in a house column indicates that three vessels with the same motif were found in that structure but that one had five horizontal lines, one had seven, and one had ten. If a motif had horizontal lines in one or more zone, a comma was used to separate the two numbers. For instance, "/-D-ADA" indicates that there was no interior decoration, the lip had one or more horizontal lines, and the exterior was decorated with \\\\ or |||| or //// followed by horizontal line(s) followed by more \\\\ or |||| or ////. In the column of the house in which this motif occurred was entered "2(1 - 1, 4; 1 - 1, 8)" which means that there were two rims of this kind: one had one horizontal line on the lip and four on the exterior while the other rim had one horizontal line on the lip and eight horizontal lines on the exterior.

While initially unfamiliar and, therefore, confusing, this notation system permits a quick assessment of: (1) the provenience of discrete motifs in longhouses across the site, and (2) the variety of attribute combinations.

MacNeish's types, as previously mentioned, were never intended to facilitate ceramic analysis at the intra-site level and research to date has confirmed their unsuitability in this regard. Attribute analyses tend either to treat each attribute as a discrete phenomenon, meaningful independent of any associated attributes, or arbitrarily combine selections of attributes hypothesized by the researcher to be pertinent to his or her particular study. As discussed earlier in this chapter, such systems must always be designed for the specific purpose for which they are intended. That this has been done for this study may be seen in the fact that emphasis has been placed on rims from features excavated within houses, on interior/lip/exterior vessel decoration which is typical of ceramic pots yet sufficiently variable to permit the hypothesis of attached meaning, and on a notation system that preserves all of this data in the order in which it occurred while facilitating assessment of possible contextual significance.

As can be seen in Table 4, no association between longhouse context and decorative attribute or decorative motif could be identified. Interior vessel decoration was either absent or a short oblique or vertical stroke. Each of the longhouses had pots of both types. Lip decoration was more varied but no more definitive of resident patterns that could be attributable to clans. Fourteen of fourteen longhouses had pots with no lip decoration, eleven had short oblique or vertical strokes, seven had one or more horizontal lines, three had cross-hatching, one had punctates, one had chevrons, and one had a ladder attribute.

In all but the latter three instances, attributes were present in more than one cluster of longhouses. The same situation prevailed with respect to exterior

vessel motifs. For example, by far the most popular motif was A-/-ADBDA. This accounted for seventy vessels (18%) of the total sample of three hundred and ninety-nine vessels, ninety-five (24%) if variations in interior and lip decoration were ignored. It was present in all but House 3 and House 12. Both of these houses had small pot samples, eight and five respectively.

The next most popular motif was A-/-ADBA which accounted for thirty vessels (7.5%) or, if variations in interior and lip decoration are ignored, thirty-nine vessels (9.8%). As with the previous motif, it was found in most longhouses and in all clusters of houses. Together, these two motifs account for one quarter of all of the pots recovered from the Maynard-McKeown site and, if interior and lip decoration are ignored, thirty-four percent.

Even understanding that local level social phenomenon might be more apparent in the distribution of less popular motifs, no pattern could be discerned. Some motifs were unique, or nearly so, and limited in their distribution; however, this is probably accounted for by their low frequencies. No identical combination of decorative attributes was found on at least five vessels in each cluster. In other words, there was no meaningful distribution of vessels with regard to decoration. Instead, there seems to be a surprising degree of

Figure 40: Part of a vessel from House 1.

variability in pottery motifs at the site given the relatively few attributes used. The impression is one of a homogeneous collection of pots which, on closer examination, turn out to be quite individual.

Decorative Smoking Pipe Attributes and Longhouse Context

James Deetz argued that demonstration of the past presence of social groups needs "...not only [to] demonstrate clustering of attributes in the products of one sex, but also a corresponding lack of clustering in the products of the opposite sex" (1968:46). This is an utterly reasonable argument that would provide just the sort of corroborative evidence most scholars desire. Unfortunately, it is also idealistic and could not be implemented at the Maynard-McKeown site where the database pertaining to smoking pipes is both exceedingly small and fragmented. Those pipe fragments determined to be analyzable are discussed in Chapter Six but, as only twelve of these were recovered from intra-house features, too little contextual data exists to draw any conclusions as per Deetz's suggestion.

Iroquoian archaeologists are uniquely privileged to have access to a veritable smorgasbord of archaeological, ethnological, historical, and linguistic data. Undeniably foremost among the historic data are records authored by early 17th-century explorers and missionaries to the tribes of the Wendat Confederacy. From this evidence, which is corroborated by historic and ethnographic data pertaining to other Iroquoian tribes and confederacies, it is understood that women constructed the ceramic vessels, descent was matrilineal, residence was

matrilocal, and villages were comprised of one or more clans that joined or left settlements as distinct units. Research conducted over half a century ago demonstrates that the attributes with which ceramic vessels are imbued vary across space in a manner that would seem to correspond to the homelands of the different Iroquoian tribes and tribal confederacies (MacNeish 1952). The question examined in this chapter was whether ceramic attributes also co-vary on a local level with respect to clan membership. No evidence of this was encountered at the Maynard-McKeown site, suggesting one of two possibilities. First, it could be that the extant archaeological data from the site is insufficient to address the issue because the excavated portion pertains to a single clan, leaving the possibility that ceramic evidence of one or more clans may exist in the unexcavated portions of the site. If this is true, it is then also true that clusters of longhouses do *not* pertain to independent clans as long speculated as such clusters were identified in the excavated portion of the site but none were associated with particular ceramic vessel attributes. Second, although the evidence certainly indicates that MacNeish's types correlate with Iroquoian tribal areas, it may be that this is a by-product rather than an indication of the motivation behind their creation. Select combinations of attributes intended to broadcast ethnicity at the tribal level very reasonably lead to the expectation that other attribute selections could potentially denote lower level social groups. Conversely, a lack of intention would imply that the fact of correlation between pottery design and ethnicity is a matter of happenstance and, therefore, unlikely to also occur with lower level social groups like clans and moieties. The respective roles of intention and lack

thereof in archaeological examinations of style were examined by Polly Wiessner and James R. Sackett in the 1980s (Sackett 1985; Wiessner 1983). Wiessner maintained that San arrow style was ethnically emblematic whereas Sackett held that it differentiated at an ethnic scale of analysis but without any intent on the part of their makers to do so. In other words, Wiessner believed that the style she was studying had meaning – and, specifically, a flag-waving type of meaning – whereas Sackett felt that it was simply a function of the unconscious habits of people living in close association. Another possibility is suggested in the present instance: that the style reflected on ceramic vessels from the Maynard-McKeown site was intentionally meaningful for its makers, but for important reasons that had nothing to do with declarations of social group membership. As will be discussed further in the final chapter, it is proposed that slight variations in the cosmogonies of the different Iroquoian tribes may account for differences in tribal pottery.

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
A-A-A		3					2						1		6
A-A+D-A	1 (1)														1
A-ADA-A			1 (1)												1
A-D-A					2 (2)					1	1 (3)			1 (3)	5
A-/-A	2			1	2				1		1		2	1	10
/-A-A									1					1	2
/-D-A											1 (1)				1
/-I-A	1														1
/-/-A	3	2	1				3		1						10
A-/-B	1								1						2
/-A-B									1						1
/-/-B	1	1							1						3
A-/-D	3 (1-5; 1-7; 1-10)	3 (2-6; 1-8)		1 (4)	1 (7)		2 (1-3; 1-4)	1 (8)	1 (5)	1 (4)					13
/-/-D				1 (6)											1
A-A-E							1								1
/-A-E		1					1								2
A-D-F	1 (4)														1

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
/-/-H	1														1
A-/-AA	1		1				2	2		1					7
/-/-AA					1			1							2
/-A-AB					1										1
/-/-AB	1														1
A-A-BA					1										1
A-HA-BA						1									1
A-/-BA	3	2	1		3		2		2	2		1			16
/-A-BA	1													1	2
A-A-DA		1 (5)													1
A-/-DA	2 (1-4; 1-8)				3 (1-7; 1-8; 1-9)		1 (4)			1 (3)		1 (5)		2 (1-4; 1-5)	10
/-/-DA	1 (4)	1 (4)								1 (6)					3
A-/-DB				2 (1-1; 1-2+1)											2
/-/-JA					1										1
A-/-AAA	1						1								2
/-/-AAA										1					1
A-A-ABA					1										1

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
A-D-ABA	1 (1)														1
A-/-ABA	3						1		1	1			1	1	8
/-/-ABA		1	1												2
A-A-ADA	1 (8)	1 (2)			1 (6)										3
A-/-ADA	1 (2)	5 (3-4; 1-5; 1-6)		1 (8)	2 (6)		7 (4-4; 2-5; 1-8)	1 (1)	1 (3)		1 (4)		1 (6)	1 (4)	21
/-A-ADA	1 (2)				1 (6)										2
/-D-ADA		2 (1-1,4; 1-1,8)													2
/-/-ADA	2 (1-7 or 8; 1-15)	1 (7)	1 (7)		1 (7)		2 (2)		1 (4)	2 (1-5+6; 1-7)				1 (8)	11
A-A-ADB							1 (3)								1
A-D-ADB							1 (2,2)								1
A-/-ADB							1 (4)	2 (4)							3
/-/-ADB	1 (3)						1 (3)								2
A-/-BDA					1 (7)										1
/-E-BDA		1 (1)													1
/-A/DAA	1 (2)														1

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
/-/-DBA				2 (2)											2
A-/-ABDA					1 (1)			1 (1)						4 (3,3; 1-4)	6
A-A-ADAA	2 (1-4; 1-6)														2
A-D-ADAA	1 (2,1)						1 (1,3)								2
A-/-ADAA	1 (3)														1
/-/-ADAA	1 (3)	1 (4)											1 (3)		3
A-A-ADBA														1 (5)	1
A-/-ADBA	7 (1-1; 5-3; 1-4)	4 (4-3)				1 (4)	3 (2-2; 1-3)	2 (2)	7 (2-2; 2-3; 2-6; 1-7)	2 (2-3)			3 (2,2; 1-3)	1 (5)	30
/-A-ADBA							1 (2)								1
/-/-ADBA		3 (1-1; 1-2; 1-3)			1 (2)		1 (2)						1 (3)	1 (1)	7
A-/-ADBD							1 (2,2)								1
A-/-ADEA					1 (5)										1
/-/-ADHA								1 (4)							1
/-/-DADA	1 (2,1)														1
A-/-BDBA														1 (4)	1

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
A-/-DBDA	2 (1-3,1; 1-5,5)							1 (5,1)							3
/-A-DBDA	2 (1-1,1; 1-2,2)				2 (2-2,2)									1 (1)	5
/-/-DBDA	1 (3,2)														1
A-D-AADAA	1 (2,1)														1
A-/-AADAA	1 (1)														1
A-D-ADADA	2 (1-2,2,1; 1-2,7,1)	1 (2,3,1)													3
A-E-ADADA	1 (1,1)														1
A-/-ADADA	1 (3,2)		1 (2,2)		3 (2-2,2; 1-4,2)	1 (3,2)	1 (3,3)		1 (2,1)						8
/-/-ADADA		1 (3,2)			1 (2,2)		1 (1,1)		1 (3,4)		1 (1,1)				5
/-/-ADADB	1(1,1)														1
A-A-ADBDA		1 (2,2)			3 (2-2,2; 1-3,3)				1 (1,2)	1 (2,2)					6
A-D-ADBDA	2 (1-1,3,2; 1-2,4,3)			1 (1,3,3)			1 (2,2)								4

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
AA-/-ADBDA	1 (3,2)														1
A-/-ADBDA	14 (2-1,1; 2-2,2; 1-2,3; 2-3,2; 6-3,3; 1-4,3)	7 (1-1,1; 2-2,2; 2-3,2; 2-3,3)		1 (2,2)	12 (1-2,1; 1-2,2; 4-3,2; 6-3,3)	1 (2,2)	3 (1-2,1; 1-2,2; 1-3,3+2)	5 (1-1,1; 1-2,1; 2-2,2; 1-3,2)	8 (1-1,1; 2-2,2; 1-3,2; 3-3,3; 1-4,3)	2 (1-2,1; 1-3,2)	5 (4-3,2; 1-3,3)		7 (1-2,2; 1-3,1; 4-3,3; 1-4,4)	5 (1-1,1; 1-2,2; 1-3,3; 1-4,1; 1-6,1)	70
/-A-ADBDA									1 (2,2)					3 (2-2,1; 1-2,2)	4
/-AD-ADBDA				1 (1,3,3)											1
/-D-ADBDA									1 (1,4,2)						1
/-/-ADBDA	3 (1-2,1; 1-3,1; 1-4,2)			2 (2-2,1)	2 (2,1)		3 (1-2,1; 1-3,1; 1-3,2)	1 (2,2)					1 (3,3)	2 (1-2,1; 1-3,3)	14
A-/-ADCDA			1 (3,2)												1
/-E-ADCDA										1 (3,3)					1
/-/-ADAADA	1 (3,1)														1
A-A-ADADAA													1 (2,3)		1
A-/-ADADAH	1 (1,2)														1
A-A-ADADBA	1 (1,1)														1
A-/-EEEEEA	1														1

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
A-/-ADADADA	1 (2,2,2)														1
A-/-ADADBDA									1 (1,2,3)						1
A-/-ADBDADAA	1 (2,3,3)														1
A-/-A+K											2				2
/-/-B+A												1			1
A-A-D+A	1 (1)														1
A-/-A+DA	1 (5)											2 (5, ?)			3
A-A-D+AA		1 (5)													1
/-/-D+AA		1 (?)													1
/-/-B+KA					1										1
A-/-D+BA						1 (2)									1
A-/-AA+D+LA													1 (?)		1
A-/-ADA+KA											1				1
A-/-ADB+GA	1 (2)									1 (3)					2
/-/-ADB+GA										1 (2)					1
A-/-ADA+GDA										1 (3,3)					1
A-A-ADB+GDA		1 (2,2)													1

Decorative Motif	House 1	House 2	House 3	House 4	House 5	House 7	House 9	House 6	House 8	House 10	House 17	House 12	House 13	House 16	Total
A-/-ADB+GDA														1 (4,2)	1
A-A-ADG+JDA					1 (2,2)										1
/-/-ADJ+DDA											1 (3,2)				1
A-G-GADB+GDA														1 (1,1)	1
A-A-/														1	1
/-/-/	1							1							2
Total	90	46	8	13	50	5	45	19	33	20	14	5	20	31	399

Table 4: Maynard-McKeown Ceramic Vessel Decorative Motifs by House. Houses are arranged according to their orientation: Cluster 1 = Houses 1-5,7; Cluster 2 = 9; Cluster 3 = 6, 8, 10, 17; and, Cluster 4 = 12-13, 16. Hyphens separate interior, lip, and exterior vessel decoration. Numbers in brackets refer to the number of horizontal lines present, groupings of horizontal lines interrupted by another attribute are separated with a comma. Legend:

A (\\\\, ||||, ////)
B (Filled Triangles)
C (Empty Triangles)
D (Horizontal line or lines)
E (Cross-Hatch)
F (Corn Cob Effigy)
G (Ladder)
H (…., ○○○○, punctates)
I (<, >)
J (Diagonal Lines)
K (Dashes)
L (Empty Space)
M (Vertical Lines)
/ (No Decoration)

CHAPTER FIVE: PURIFICATION STRUCTURES

St. Lawrence Iroquoian archaeology has come a long way since the early 20th-century when Wintemberg dug the Roebuck site without recognizing that many of the post-moulds he uncovered demarcated past dwellings. Today, scholars are not only capable of discerning longhouses in the archaeological record but also realize the potential for other types of structures to be present as well, including: chief's houses, sweatlodges, guest houses, woodsheds, medicine-men residences, temporary procurement site structures, bear enclosures, granaries,

Figure 41: Aerial view of the site. This photograph includes: (1) a multi-row palisade and defensive ditch (far right), (2) longhouses, (3) two sweatlodges (upper centre), (4) a double-row palisade demarcating the limits of the village prior to its expansion (visible in the upper left corner but, in fact, extending across the entire visible area of excavation), (5) a probable woodshed around the bottom and right side of House 2 below the bobcat (invisible in this photograph because it was not staked), and (6) a series of posts linking Houses 2 and 4 that have been interpreted as part of a bear enclosure (invisible in this photograph due to tree cover and not being staked).

gardening huts, and gender-specific houses. This raises the reasonable concern of just how the original use(s) of architectural constructions that time and the

processes of decay have reduced to faint two-dimensional outlines can be determined.

Insights into the function of past buildings can be ascertained by: (1) settlement patterns, (2) idiosyncratic architectural features, (3) associated and disassociated material culture, and (4) historic and ethnographic evidence. For example, at the A.D. 1450 to 1500 Steward site, the faunal record and the fact that the excavated longhouses were situated approximately two hundred metres from the St. Lawrence River was immediately deemed to be suggestive of a fishing station (Jamieson 1982:26, 30). Corroborating evidence was derived from the detailed inspection of one of the houses which established that it was shorter and unusually wide in comparison to most inland village longhouses and had a central hearth, but few features (Pendergast 1990:19; Wright 2004b:1267). This was interpreted as appropriate for a temporary, warm-weather, habitation that would, furthermore, have been suitable for the drying and smoking of fish (Pendergast 1990:19). Conversely, within a village context, unusual longhouse width and/or length has been interpreted as useful in the identification of chief's houses (Trigger 1968:58). House 10 at the Middle Ontario Iroquois Nodwell site, for example, was wider than any other house in the village, had wider bunk lines, and offered its occupants more square footage of living space (Wright 1974:56, 307). In this instance, this interpretation is substantiated by historical documentary evidence originating with the Jesuit missionary to the 17th-century Wendat, Jean de Brébeuf, who noted that: "The largest Cabin of the Village is set aside for the reception of the company. They do not hesitate to inconvenience themselves for

each other on these occasions. The matter is esteemed of such importance that, when a Village is built, they purposely put up one Cabin much larger than the others..." (Thwaites 1959 10:181).

Similar testimony has resulted in the archaeological interpretation of longhouses outside of palisades as guest houses and any cordoned off area as a bear enclosure (Ramsden, C. 1989:19; Tyyska 1972; Wright 2004b:1364, 1974). In fact, without historic testimony, the purpose of some past structures would probably remain a mystery. A good example of this is a Seneca maize granary described by Lafitau as a bark-covered tower (Fenton & Moore 1977:56).

Men's Sweatlodges

Figure 42: Both of the Maynard-McKeown sweatlodges are visible in this photograph although only one has been demarcated with stakes. The other is situated toward the bottom of the photograph slightly overlapping the end of House 6.

Historical documents also contain information pertaining to the past use of sweatlodges by Iroquoian men. According to these records, small poles were set in the earth in a circular fashion and bent over to create a dome that

was covered with animal hides and/or bark (Thwaites 1959 13:203; Wrong 1939:197). Stones were heated, arranged in a pile in the middle of the sweatlodge, and water poured over them to produce steam (Fenton & Moore 1977:207; Thwaites 1959 13:203, 26:177; Wrong 1939:197). While in the sweatlodge, the men would sing and shout, and sometimes burn an offering of tobacco (Thwaites 1959 13:203, 26:177; Wrong 1939:198). If a body of water such as a river or a creek was located nearby, the men would refresh themselves in it after exiting the sweatlodge (Fenton & Moore 1977:208; Wrong 1939:198).

The purpose of the sweatlodge was to cleanse the body and purify the spirit in order to commune with the supernatural. Much of the documentary evidence refers to the use of sweatlodges by medicine-men attempting to "gain some knowledge of...disease" in order to cure ill patients or to men striving to maintain their physical health (Fenton & Moore 1977:207; Thwaites 1959 13:105, 203; Wrong 1939:197). This was because Iroquoian medicine treated the spirit as central to physical well-being. Some illnesses were thought to be generated by the unfulfilled desires of a person's own soul whereas others were believed to be caused by pernicious supernatural beings or witches like the snake described in Chapter Three that the Jesuits were accused of harbouring (Thwaites 1959 13:213, 33:201). Dreams were thought to hold the answer in the first instance and the subsequent provision of the object of desire was considered to be the agent of healing (Thwaites 1959 10:185; 15:179, 33:189, 191). In the second, the sweatlodge might be used by either a medicine-man alone or by a number of men (Thwaites 1959 14:65). In one notable instance, a man used the sweatlodge in

order to exhort a spirit to make medicine given to his relative effective (Thwaites 1959 13:213). Additional historic references document the use of sweatlodges to acquire other types of information; for example, foreknowledge of future events, including battle (Thwaites 1959 10:197, 26:175-177). As noted previously, Iroquoian warfare was ideologically premised with the result that:

> Purificatory rites were usually required both before and after war, and there were many strict prohibitions while actually on the war-path. Sexual continence on the part of the warriors might be demanded during the entire period of hostilities…success in war meant the satisfaction of supernatural compulsives...(Knowles 1940:153).

With respect to the physical construction of sweatlodges, historic documentary evidence states that "...they arrange sticks planted in the ground, as high as the waist or higher, and bent over at the top, in the shape of a circular table", that a sweatlodge used by a single medicine-man was "two or three feet in height", one designed to enclose twelve or thirteen men was constructed from "four or five poles in a ring" while seven or eight people can fit in "a little round lodge six or seven feet high" (Fenton & Moore 1977:207, 210; Thwaites 1959 13:203,26:175; Wrong 1939:197). Sagard described intra-longhouse sweatbaths but also mentioned their use outside of longhouses and, indeed, outside of even the village precincts (Wrong 1939:197).

The earliest archaeological evidence of Iroquoian sweatlodges dates to the Early Ontario Iroquois stage Pickering Bennett site (Wright 2004b:1342; Wright & Anderson 1969). Sweatlodges identified on Southern Ontario sites can be either surficial or semi-subterranean, the latter often being identified by a distinctive key-hole or turtle pattern in the archaeological record and the former

described as supplanting the semi-subterranean type by the 15th-century and sometimes having a central hearth (MacDonald & Williamson 2001:70; Warrick 2007:149; Wright 2004b:1376). They are frequently associated with fire-cracked rock, either within the sweatlodge or deposited nearby, and some have a layer of ash and charcoal (Tyyska 1972:9; Warrick 2007:149). The intra-longhouse variety have been identified in the central corridor, along bunklines, or appended to the ends of houses.

Many scholars working in the region have accepted the view introduced by Allen Tyyska that Iroquoian sweatlodges, like Iroquoian ossuaries, functioned as mechanisms of social integration (MacDonald & Williamson 2001:71; Tyyska 1972:15; Warrick 2007:149; Williamson & Pfeiffer 2003:90). This is a concept that was elaborated upon by Mima Kapches who suggested that they were furthermore vehicles for the male bonding she perceived as necessary for men living in a matrilineal society with matrilocal residence patterns (Kapches 1995:90; MacDonald & Williamson 2001:71). Hall advocates an additional explanation; specifically, that sweatlodges are a uterine metaphor and, thus, signify rebirth, an interpretation that has also been applied by Puebloan archaeologists to kivas which were also primarily used by men (Hall 1997:124-131; Hays-Gilpin 2008:251). He notes that heat has a transformative effect, such as culturally during cooking or pottery firing and naturally with the hatching of eggs, and likens emergence from the warm confines of a sweatlodge with birth (Ibid.). Support for this interpretation may be found in legends associating the sweatlodge with transformation and, specifically, resurrection (Hall 1997:125).

Hall's hypothesis would also seem to be germane to the interpretation of infant and child burials that were situated immediately adjacent to semi-subterranean sweatlodges at the Middle Ontario Iroquois Myers Road site, human crania fragments probably constituting a former parietal rattle at the late 13th-century Moatfield village, the interment of five individuals inside a sweatlodge at the 15th-century Wendat Dunsmore site, and the discovery of human burials and bone in two sweatlodges at the Pickering Bennett site (Finlayson 1998:198, 200; Robertson & Williamson 2003:28; Williamson 1998:78, 80, 2007:203). In fact, Finlayson has gone so far as to affirm that the "...association of human bone with these features is one of their diagnostic features in the Crawford Lake area" (Finlayson 1998:198).

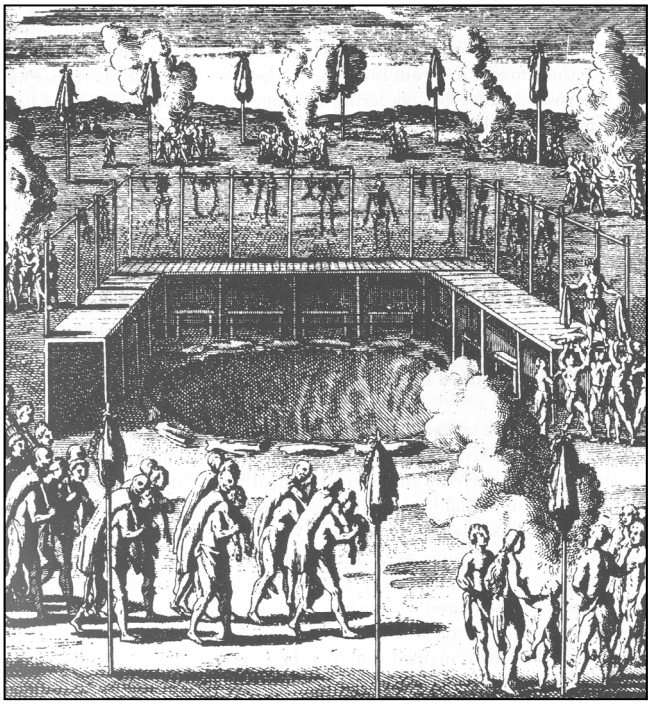


Figure 43: As noted by Trigger, this woodcut constitutes an 18th-century artist's visual interpretation of Jean de Brebeuf's description of the Wendat Feast of the Dead he witnessed in 1636 at Ossossané. From Lafitau's 1724 Moeurs des sauvages amériquains (1976, Plate 8).

For reasons supplementary to those he considered, Tyyska's correlation between sweatlodges and ossuaries is quite appropriate. First, archaeological and historical evidence clearly demonstrates that ossuaries contained secondary burials just as did the sweatlodge at the Dunsmore site (McMillan 1988:58; Robertson &

Williamson 2003:28; Williamson & Pfeiffer 2003:91-92; Wrong 1939:211). Second, both sweatlodges and ossuaries were similarly constructed. In addition to being round, sweatlodges are recorded as having been covered in bark and/or hides as were ossuaries (Thwaites 1959 13:203; Wrong 1939:197, 212). A sweatlodge was formed by sinking poles in the earth and bending them over to create a domed effect while posts were sunk around ossuaries to which coverings were attached (Thwaites 1959 13:203; Wrong 1939:197, 208, 212). Archaeological evidence of postmoulds around ossuary pits at Ossossané and Sopher support historical testimony in this regard (Williamson & Pfeiffer 2003:109, 111). Third, in the centre of the Uxbridge ossuary were placed eight large rocks very like the heating rocks situated in the centre of sweatlodges (Fenton & Moore 1977:207; Thwaites 1959 13:203, 26:177; Williamson & Pfeiffer 2003:106; Wrong 1939:197). Furthermore, the earliest evidence of ossuary burial has been traced to Early Ontario Iroquois stage Pickering sites which suggests continuity to the discovery of evidence of fire at the centre of one of the Miller Mounds (Boyle 1897; Johnston 1979:96). Fourth, the concept of reincarnation was prominent in both ossuary burial and the use of the sweatlodge. As already discussed, mythological and archaeological evidence supports Hall's suggestion that sweatlodges were associated with the concept of rebirth. As for ossuaries, there is historic evidence that indicates that one of the two souls that the Wendat believed resided within a person was released to the Afterworld during the course of the Feast of the Dead ceremony, which involved ossuary burial, while the other remained with its bones until such time as it was reincarnated

(Thwaites 1959 10:287). Fifth, both ossuaries and sweatlodges have turtle associations. In fact, with skulls arranged on top as they were at Moatfield and possibly Sopher, an ossuary would closely resemble a turtle nest (Williamson & Pfeiffer 2003:111, 152). Lest this statement be thought too fantastic, consider that: (1) semi-subterranean sweatlodges are described in the archaeological literature as turtle-shaped (the earliest examples of which date to the Early Ontario Iroquois South Track and Bennett sites), (2) a reference in the *Jesuit Relations* indicates that two bodies being prepared for ossuary burial were respectively found to contain a turtle egg with a leather strap and a small turtle, (3) the careful placement of a turtle effigy pipe on the floor of the Moatfield ossuary, (4) the presence of a turtle effigy in the Neutral Dwyer ossuary; and (5) a broken turtle effigy *busycon* shell gorget in the chest cavity of a human burial in one of the Miller mounds. Likewise, a human male burial at Serpent Mounds was interred with large fragments of a turtle carapace (*Chrysemys*) under his head (Boyle 1897; Finlayson 1998:198; Johnston 1968:24, 108-109; Kenyon 1986:12-13, 88; Pearce 2005:95; Perrelli 2009:44; Thwaites 1959 10:285; Williamson & Pfeiffer 2003:140). Turtles are very important in Iroquoian cosmogony. Not only was the earth itself believed to rest upon the back of a turtle, making this world Turtle Island, but Turtle was also considered to be the father of the creator twins, and it was Turtle who taught his good Creator son how to make fire (Curtin & Hewitt 1918:411; Hewitt 1928:482-485; Parker 1916:495; Perkins 2004:595; Thwaites 1959 10:127-139, 30:61, 63). Referring back to Hall's observations regarding the transformative effect of heat, such as on incubating turtle eggs, it is

notable that sweatlodges utilize heated rocks, the ossuary at Uxbridge contained similarly positioned rocks, and food, likewise transformed via heat, is reflected in the name of the rite associated with ossuary burial (The Feast of the Dead), participants in the ceremony feasted extravagantly, and kettles as well as dishes of corn were interred in the ossuary (Thwaites 1959 10:297, 301; Williamson & Pfeiffer 2003:110, 116; Wrong 1939:211-212). Moreover, the staples of the Iroquoian diet – corn, beans, and squash – were planted in mounds that would have physically resembled ossuaries and sweatlodges and it is said that heated rocks were sometimes used to keep the young plants warm (Parker 1968:17, 26, 91; Waugh 1916:16). Also, like ossuaries and sweatlodges, the origin of these plants was associated with the concept of rebirth in that it was said that they were first found on the grave of the Creator's mother (Engelbrecht 2003:22; Wonderley 2004:173).

Two sweatlodges have been identified at the Maynard-McKeown site (Pendergast 1990a:27; Wright 2004b:1265). These are situated toward the north end of the portion excavated during the summer of 1987, in the north-eastern quadrant of the site, and occur in an area that was originally adjacent to the village but which was eventually incorporated during one of two subsequent expansion phases. The sweatlodges were clearly constructed prior to one or both of these village expansions as longhouses built over the original palisade overlapped them as well. It is likely as a result of this that one of the sweatlodges, that which is overlapped by House 8, exhibits a considerable amount of disturbance. Nevertheless, evidence of hearths, charcoal, rocks and ash, remain. This

sweatlodge measured four metres by four and a half metres while the other, which was overlapped somewhat by House 6, was slightly smaller at four metres by three and a half metres. This sweatlodge also produced evidence of a hearth and charcoal. Both sweatlodges contained a limited amount of general refuse that cannot entirely be explained by the overlapping longhouses and may indicate, as has occurred with sweatlodges on other sites, that once they ceased to be used for the purpose for which they were built they became repositories for rubbish (Wright 2004b:1342).

Women's House

Figure 44: In this photograph the position of House 3, tucked between three rows of palisade and a much larger house, can be appreciated. From the vantage of the rest of the village, it would have seemed as though it did not exist.

In comparison with historic and archaeological evidence for sweatlodges used by Iroquoian men, evidence of structures for the exclusive use of Iroquoian women is scant to say the least. This is not surprising when it is considered that

the primary historical documents were written by men who were probably either unaware and uninterested in issues of prime concern to women or justifiably apprehensive of the reaction of Iroquoian men if Iroquoian women were questioned closely on such matters. The lack of archaeological interest in women's houses is, correspondingly, partially attributable to the dearth of historic testimony on the matter. It can also be explained in part by the fact that, until recently, most archaeologists have been men who also have little reason to hold issues of chief concern to women in the forefront of their minds. However, just as anthropologists are expected to be aware of possible cross-cultural differences so, too, should they be attuned to potential gender distinctions. Positive indications of just such a broadened perspective in North America can be found in the purported, albeit unpublished, identification of women's houses at the Fort Ancient Sunwatch site and at the BBB Motor site (Galloway 1997:51-52, 60). Unfortunately, neither of these is Iroquoian and, to date, no woman's house has been identified on an Iroquoian site.

However, there is a single reference in the extant literature to the one-time use of women's houses in Iroquoian culture. According to testimony published by Shimony, at some point in the distant past pubescent girls "...were isolated in a hut for a year and forced to sit facing the walls. Food was taken there by a guardian woman, but otherwise no human contact was allowed during that interval" (1961:216). Clearly, this is a very tenuous declaration upon which to base an argument for the past use of women's houses in Iroquoian society. Not only is the statement derived from an ethnographic rather than a historic text and,

consequently, probably separated by a considerable amount of time from the era described, but the situation described is fantastic and, frankly, untenable. Nevertheless, female adolescents underwent puberty rites just as historic evidence more frequently indicates their male counterparts did and, like males, this involved social seclusion:

> The Huron, Iroquois and Algonquian tribes also have their initiations which they still celebrate. All that I know about them is that they are begun at the age of puberty; that they [the initiates] retreat into the woods, the youths under an elder or a shaman's direction, the young girls under a matron's. During this time, they fast very strictly; and, as long as their fast lasts, they blacken their faces, the tops of their shoulders and their chests. In particular, they pay careful attention to their dreams and report them exactly to those in charge of them (Fenton & Moore 1974:217).

Slightly more common are historic and ethnographic references to a power associated with women during menstruation and pregnancy. The perceived creative potency of the female gender is reflected in the belief that the presence of a pregnant woman was necessary for the successful removal of an arrow from an injured man and in the Seed Planting Ceremony where a game of Bowl played by teams respectively comprised of men and women was interpreted as successful with respect to the fate of the crops if the women won but a prediction of a poor harvest if the men won (Shimony 1961:155; Thwaites 1959 17:213).

In contrast to Herrick who, without clarifying his reasoning or offering supportive evidence, has chosen to associate menstruation with a concept termed *?otkö?* which he says is used in reference to anything considered contaminated or evil, it is suggested that in Iroquoian society the creative powers of women and the destructive potency of men were not contradictory forces but, rather, complementary aspects of a combined effort to sustain Iroquoian society through

time (Berres 2001:29; Herrick 1995:37). While this entailed the careful management of these respective powers in certain situations, antiquated notions common in the anthropological literature of so-called female "pollution" are inappropriate (Buckley & Gottlieb 1988:7). For example:

> Among all the Déné and most other American tribes, hardly any other being was the object of so much dread as a menstruating woman. As soon as signs of that condition made themselves apparent in a young girl she was carefully segregated from all but female company, and had to live by herself in a small hut away from the gaze of the villagers or of the male members of the roving band. While in that awful state, she had to abstain from touching anything belonging to man, or the spoils of any venison or other animal, lest she would thereby pollute the same, and condemn the hunters to failure, owing to the anger of the game thus slighted (Frazer 1951:241).

There were times, as noted above, when the life-giving powers of women were considered helpful and necessary (Thwaites 1959 17:213). Conversely, this potency was inappropriate in other circumstances. For example, men about to go to war or to hunt needed their death-giving potency intact and not lessened by the life-giving powers of a menstruating or pregnant woman (Thwaites 1959 15:181, 183). It was also considered important that such women did not come into contact with medicines as the remedies would likely become ineffective and the women might be injured (Shimony 1994:216; Thwaites 1959 13: 261, 15:181, 183). In more recent times, at least three ceremonies, the Raspberry, Strawberry and Midwinter ceremonies, were "scheduled five days after the 'berry moon'...to allow women to pass their menstrual period and attend the ceremony" (Shimony 1994:158-159, 161, 174). The dual beneficent/maleficent nature of female power is reflected in a Jesuit observer's statement that a pregnant woman's "...condition the devil has rendered highly important in these countries, for good as well as bad

luck, in a thousand contingencies and occasions" (Thwaites 1959 17:213). Similarly, just as at certain times a woman needed to remove herself from the vicinity of men about to go to war or to hunt because her creative powers might interfere with his destructive powers so, too, is it recorded in the historic literature that a man kept himself away while babies were breastfed and, thus, sustained through a woman's life-giving potency (Thwaites 1959 8:127).

Archaeological evidence of structures clearly associated with Iroquoian villages but removed to a limited degree have, on occasion, come to light. For example, the 17th-century Frog Pond site consists of a single small diamond-shaped structure with two hearths and very few pits and associated material culture situated five hundred metres respectively from each of two separate hamlets (Bursey 2006:4, 6-7, 9). Bursey interpreted it as a medicine-man lodge (2006). At the Middle Ontario Iroquois Nodwell site, Jim Wright considered a longhouse located immediately outside the village palisade, but connected with it, as a guest house (Wright 2004b:1345, 1974). Both types of structures are alluded to in the extant historic and ethnographic literature and, while it is quite possible that they are not women's houses, neither researcher apparently considered the possibility that they were women's houses. Special structures have been identified at other Iroquoian sites on the basis of settlement pattern evidence; for example, houses 22 and 46 at the Wendat Draper site (Finlayson 1985:399). However, while the placement and, sometimes, shape of these houses is intriguing, something more than settlement pattern is required in advance of an interpretation of past function.

Sagard stated quite clearly that Wendat women did *not* leave their dwellings while menstruating but, instead, ate their meals out of special small pots at that time (Wrong 1939:67). However, given extant historic and ethnographic clues to the attitudes and prescriptives surrounding menstruating and pregnant women, the single reference to the use of women's houses at one time in the distant past, and archaeological evidence of structures situated adjacent to villages, the possibility remains that some Iroquoian women did use women's houses and that these can be identified archaeologically. As Trigger observed, archaeological and ethnohistoric evidence indicates that significant differences, including discrepancies relating to settlement pattern, existed between the Wendat and tribes of the League of the Iroquois (1981:6-7). As the St. Lawrence Iroquoians were more similar to the eastern Iroquois of the League than the Wendat, it is possible that Sagard's assertion did not apply to them.

Furthermore, cross-cultural research has indicated that "...menstrual seclusion and its accompanying practices are advantageous to women and are characteristic of societies where husbands and males in general are not particularly dominant, especially matrilineal societies where residence rules are generally matrilocal" (Galloway 1997:50). Galloway, in fact, views the correlation between women's seclusion and a matrilineal descent structure as sufficiently strong to warrant seeking evidence of women's houses in the archaeological record "...if we can just figure out what a 'menstrual hut' ought to look like in the ground" (Galloway 1997:51). Iroquoian society has been widely

described as egalitarian and, as already discussed, descent was matrilineal and residence matrilocal.

Given that women's houses would have been used to prevent interference with men's hunting and warrior abilities, as well as the efficacy of medicines, it would be expected that, if such a house existed, it would be located either: (1) adjacent to, but outside of, the village or, (2) in times of heightened warfare, in an unfrequented area within the palisade such as was the case with the women's house identified at the Fort Ancient Sunwatch site (Galloway 1997:51-52). Although mid-18th-century Chickasaw women were heralded as brave for continuing to isolate themselves outside of their communities despite ongoing warfare, it is perhaps more reasonable to expect that Iroquoian women remained in the village given the value placed on them in their society (Galloway 1997:55): "...it is they who people the country, [and therefore] their lives should be more valuable to the public", an attitude that is reflected in the Condolence Council of the League of the Iroquois when "...the orator, speaking of the consequences to the commonwealth at large the deaths of the different persons and orders of persons entailed, says 'But, when a woman dies, a long line (or series) of persons fall, and we are thus made very poor by it'" (Hewitt 1895:110; Thwaites 1959 33:243; see also Thwaites 15:181-183). When the Recollet Gabriel Sagard lived among the Wendat in the early 17th-century, the situation was sufficiently dire in the frontier regions that women were said not to be able to tend the crops without a warrior present for protection (Wrong 1939:164).

One house at the Maynard-McKeown site has been perceived as atypical of most Iroquoian longhouses since its excavation. Like the sweatlodges previously discussed, its construction may have been contemporaneous with the original village before its expansion in which case it would have been built outside of the original palisade but incorporated within a more recent palisade when the village was expanded:

> One longhouse, House 3...excavated on the McKeown site...is believed to have been a structure outside the core village palisade. It served some purpose other than as a habitation. This conclusion is premised on the absence of post molds to mark the presence of bunk lines and the locations of the hearths, one at each end of the structure. It has been suggested that this was a guest house used to keep inquisitive visitors outside the core village palisade. Possibly it was a hut reserved for special events. Meetings, feasts, and torture come to mind as possible uses (Pendergast 1990a:23).

Pendergast also notes that, if the house were a guest house, its utility as such ended with its incorporation within the palisade (1988:4). He also speculates that, as its southern wall is so closely situated next to the northern wall of House 1, it was probably demolished when House 1 was built (Pendergast 1988:4). In the first instance, his argument provides good reason to suppose that House 3 was *not* a guest house. In the second, the logic of his argument fails. One has only to look at the site plan, or any Iroquoian plan of a site that has undergone expansion, to realize that Iroquoian builders suffered no compunction against overlapping previous floorplans to either a small or a large extent. The fact that, in this instance, the construction of House 1 comes so close without doing so is noteworthy.

It is possible that part of the explanation for this can be found in the fact that House 1 very effectively conceals House 3 from the rest of the village.

House 1 measures slightly over 32 metres by 6 metres whereas House 3 is approximately 16 metres by 5 metres. Not only does House 1 extend beyond House 3 at both ends, but House 9 almost meets its western end leaving only a small path between by which to access House 3. Furthermore, the northern wall of House 3 is as tightly aligned with the palisade as its southern wall is with the northern wall of House 1. And, to the east, the palisade arcs around meeting up with the end of House 1 so that, while a small outdoor space remains, it is entirely inaccessible except *through* House 3. All of this is highly suggestive of an effort to provide the users of House 3 with a degree of seclusion despite its incorporation within the palisade during a period of increasing hostilities. And the threat was very real: less than half a century later, Samuel de Champlain would find no trace of the St. Lawrence Iroquoians encountered by Jacques Cartier.

The author(s) of the Maynard-McKeown faunal report also found House 3 puzzling (Ostéothèque de Montréal 1989:10-11). It was concluded that "This small sample of bone may indicate that House-3 was not inhabited for a long period of time or by very few people, although the numerous features would argue against this latter supposition" (Ibid.). Furthermore, none of the remains were birds which would reasonably be associated with Sky World and, thus, men (Ibid.). Except for the sweatlodges and houses subjected to limited excavation, this was uncharacteristic of other houses in the village (Ibid.).

Also unique was the absence of chipping detritus. In fact, the only ground stone item found in the house was a metate, a woman's tool upon which corn was

ground. This might be significant as there are indications that stone work was a male activity (Kuhn 1985:59-60). There were, however, two small unanalyzable smoking pipe fragments which is an exceptionally small number for a longhouse but unexpected at all in a potential woman's house if it is indeed true that women did not smoke tobacco. Fragments of ceramic vessels found in the house, though few in number, were typical of those from the rest of the site.

House 3 had two hearths around which the intra-house pit features were clearly clustered. A possible explanation for this phenomenon may be apparent in the results of Shimony's ethnographic fieldwork among the Iroquois which revealed that, at least in later Iroquoian society:

> The fireplaces, or 'fires'...identify and symbolize the moieties. Each moiety 'owns' one of the stoves and gives this stove its own name, i.e., Wolf or Turtle in the Cayuga Longhouses, and Two Fire-Places or Four Houses in the Onondaga and Seneca Longhouses. In the latter two Longhouses, however, the stoves are more often identified by the 'leading' clan on each side of the moiety and are called the Deer stove and the Wolf stove...Each moiety considers that half of the Longhouse in which its stove is located as its own territory, and it offers its stove for use and service to the opposite moiety. Physically, action takes place around the stove, and figuratively the speeches bring to life the 'fire' of the moiety. The room is ringed by tiers of benches, and each moiety rings its own stove on...ceremonial days.... (Shimony 1994:46-47).

Archaeological interpretations of sweatlodges as such are not generally contested given the quality and quantity of historic and ethnographic evidence describing their construction and use. The shape and size of structures identified in the archaeological record generally conform to the sweatlodges described in the literature and, if there is any doubt, the frequent presence of fire-cracked rock serves as further corroboration. Unfortunately, however, the same cannot be said of women's houses. For reasons already discussed, male explorers and

missionaries usually did not (or could not) question women on matters peculiar to them. Consequently, there are no descriptions of women's houses in the Iroquoian literature, just a few tantalizing hints that they may once have been used. Thus, Galloway was quite correct when she stated that the root of the problem of identifying potential women's houses lies in figuring "...out just what a 'menstrual hut' ought to look like in the ground" (1997:51). Without historic or ethnographic evidence, all that remains is archaeological evidence. At the Maynard-McKeown site, this consists of: (1) an unusually small longhouse tightly tucked between a larger longhouse and a section of the palisade in a manner that would have made it invisible to the rest of the village while yet being within the settlement walls (at least as of the final village expansion), (2) an atypical absence of bunklines within the house, (3) the presence of two hearths which are suggestive of the double moiety hearths discussed in the ethnographic literature, (4) a strikingly small faunal sample with an absence of bird bones altogether, and (5) an absence of chipping detritus. From the time of its excavation, everyone associated with the Maynard-McKeown site has considered this house to be out of the ordinary for the above-noted reasons. Some have argued in favour of its interpretation as a guest house. For reasons already discussed, this argument is weak. Likewise, a possible interpretation of its association with a medicine-man is not considered strong because of the presence of the two hearths. Of all of the possibilities, a woman's house would seem to be the most expedient explanation; however, the extant evidence is certainly not conclusive. Nevertheless, the possibility exists that the examination of other unusual houses on Iroquoian sites

will elicit insights via correspondences with the data available from the Maynard-McKeown site. As mentioned, several such longhouses have been identified but not examined in detail.

CHAPTER SIX: ABSTRACT AND ICONOGRAPHIC ART

Ceramic Vessel Face Effigies

Historic records emphasize the omnipresence of metaphor in Iroquoian society. In an often quoted statement, the Jesuit missionary Jean de Brébeuf succinctly observed: "Metaphor is largely in use among these Peoples; unless you accustom yourself to it, you will understand nothing of their councils, where they speak almost entirely in metaphors" (Thwaites 1959 10:219). In fact, such was the potency of Iroquoian metaphor that expressions like "bury the hatchet" survive in popular culture to this day. As compelling as verbal metaphor can be, however, it pales in comparison with material expressions of metaphor or what Christopher Tilley would call "solid metaphors" (1999:xiv). Belief systems frequently utilize such physical manifestations of concepts as foci for group members. For example, a cross embodies the principles of the Christian faith whereas Palaeolithic steatopygia figurines are hypothesized to have signified past perspectives on fertility (Carpenter 2002:70-73; Gaskell 1960:187). It is suggested that the faces with which some ceramic vessels were decorated functioned as such foci in Iroquoian culture and, furthermore, their occasional protuberance and association with arms and even entire figures indicates that they were metonyms for a human or human-like individual of Iroquoian cosmology much as it has been suggested False Face masks are symbols operating "on the principle of substituting a part for the whole" (Fenton 1940:327).

Aside from a very unique Owasco vessel from the Castle Creek site, the faces first appear on ceramic vessels in southwestern Ontario in the Early Ontario Iroquois stage (AD 1000 to AD 1300), continue to a lesser extent through the

Middle Ontario Iroquois stage (AD 1300 to AD 1400), and disappear by the Late Ontario Iroquois stage (AD 1400 to AD 1650) (Finlayson 1998:1399; Lennox 1984: fig. 48; Mason 1981: plate 8.18; Reid 1975:81; Ritchie 1944: Plate 15; Wintemberg 1928: 79, 1948:57, 61; Wright & Anderson 1969). Outside of the Ontario Iroquois Tradition, vessels with faces occur frequently enough on St. Lawrence Iroquoian sites in eastern Ontario and western Quebec in the 14th to 16th centuries that they are considered a cultural trait, and they become increasingly common on northern New York League Iroquois sites, with an emphasis on the Seneca, Onondaga, and Oneida, in the 14th to 17th-centuries (Abel 2001:114; Clermont et al. 1983:86, 109; Engelbrecht 2003:86-87; Pendergast 1962:27, 1969:41; Sempowski & Saunders 2001:159-160; Tuck 1971:155; Wintemberg 1936:107-108; Wonderley 2002:27, 40, 2004:107-111, 2006; Wray 1973:12; Wray et al. 1987, 1991:100). They can also be found on Susquehanna pottery and on some Algonquian Minisink vessels (identified by Kraft as probable proto-Lenape or Delaware) (Kraft 1975:140, 142; Wonderley 2002:27, 40-41).

Figure 45: Bennett site vessel face with arms. Note the crooked arms reaching down on the right side of the rimsherd.

Other than the Owasco vessel, the mid-13th-century Early Ontario Iroquois stage Bennett site produced the earliest known examples of these effigy faces (Wright & Anderson 1969; see also Reid 1975:81 for 10th-century Pickering faces). As can be seen in Figure 45, their metonymic nature is clear even at this early date as demonstrated by the

presence of arms.

Six of the nine rimsherds with faces at this site were also decorated with

Figure 46: Bennett site vessel face

Figure 47: Bennett site vessel face

Figure 48: Bennett site vessel face

stacked "V" shapes and seven had gouges for eyes and mouths. These are attributes that are also found at other Ontario Iroquois Tradition sites. This occurred, for example, at the Uren substage Scout site and Wintemberg illustrates several examples from the Uren site (Finlayson 1998:1399; Wintemberg 1928:79). He also shows a few examples from the Middleport substage Middleport site where most mouths and eyes were apparently gouged, with the exception of one illustrated and one observed in the collection where punctates were used, and most seem to have been associated with stacked "V" shapes (Wintemberg 1948:57, 61).

Punctate eyes and mouth are more characteristic of St. Lawrence Iroquoian faces (Clermont et al. 1983:86, 109). For example, of an examination of sixty-three ceramic vessel fragments with faces in the Canadian Museum of Civilization collections from the Roebuck (Wright excavation only), Beckstead, Grays Creek, Salem, Steward, McIvor, Crystal Rock, and Glenbrook sites, fifty-eight had punctate eyes and mouth. Furthermore, although three were associated with stacked "V" shapes, by far the greater majority occurred with filled triangles.

Interestingly, a smoking pipe was excavated from the Dawson site that had punctates for eyes and mouth in association with "V" shapes (McCaffrey et al. 1992: 17). Seneca faces apparently usually have "eyes and mouths [that] are...formed by gouges or single lines" while a study of Oneida vessel faces, which have been described as akin to Onondaga representations of the same, led one researcher to conclude that (Wonderley 2002:27; Wray et al. 1987:78):

> ...effigies occur on a wide range of pottery 'types' which (originally) were descriptions of collar characteristics and decorative patterns thought to co-occur as a congeries indicative of an ethnic group or tribe...Over time, effigies occur on types that MacNeish characterized as Mohawk, Onondaga, Cayuga, and, of course, Oneida...For most of the Oneida sequence, it looks as though sets of parallel lines, usually obliquely or horizontally oriented, were employed as backdrop to the effigies, a framing device setting off the image. Later incised design, especially the horizontal lines of what is often called Thurston Horizontal, tends to be more fully integrated into the presentation of effigy image. Possibly this combination is more frequent than any other (Wonderley 2002:36).

Most of the eighteen rims with faces from the above-noted sites that were associated with a ladder decorative attribute were from St. Lawrence Iroquoian sites situated east of the Prescott cluster. This attribute, oriented vertically or diagonally, is in general thought to represent a more or less stylized corn motif (Blais 1993:83; Pendergast 1981:162-163, 168-171; Wintemberg 1936:113, 140-141, 150-151; Wonderley 2002:35, 2004:109). It can be found decorating pots either in association or independent of face motifs. Its relevance to vessel faces, however, becomes clear on vessels where full bodies are also present as the torsos and limbs of these figures are most often decorated with hash marks resembling ladders: "By the criteria of physical resemblance and shared structural elements, the human figure and the corn cob can be demonstrated to shade into each other

smoothly and continuously. A plausible interpretation is that the humanoid effigy has something to do with corn" (MacNeish 1952:67-68; Wonderley 2002:37, 2004:108; Wray et al. 1987:79). One extremely unique Seneca human vessel effigy even appears to illustrate pregnancy which, together with childbirth, has

Figure 49: Corn effigy from House 1

Figure 50: More abstract corn effigy from House 1

Figure 51: Another variation of an abstract corn effigy from House 1

also been represented on three effigy smoking pipes curated at the Royal Ontario Museum (Kapches 2003; Wray et al. 1987:78). This is pertinent because, in addition to female attributes, these pipes share specific characteristics with each other and with the effigy figures on ceramic vessels: (1) the bowl of the pipe or vessel (with the exception of a Dawson site vessel effigy fragment to be discussed presently) is situated behind the effigy, (2) the legs are often bent in a manner suggestive of squatting, and (3) the arms are akimbo (Kapches 2003:17; Wray et al. 1987:78).

Figure 52: Roebuck site protuberant face

Another consideration regarding the ladder attribute and corn cob effigies

Figure 53: Glenbrook site protuberant face

is simply as follows: if hatching signifies corn, is it not also possible that stacked "V" shapes, such as those illustrated in Figures 47 and 48, mirror the appearance of a mature corn plant's leaves? Certainly, corn is commonly illustrated in the material culture of many peoples of the Americas (e.g. Mangelsdorf 1974). With respect to the Iroquoians, Parker illustrates an example of such in the form of a ceremonial cane crafted to appear as a cob of corn with distinct kernels (Fenton1968:87). Interestingly, it is remarkably similar to fragments of ceramic and stone smoking pipes excavated from Iroquoian archaeological sites. Other examples of the realistic portrayal of plants important to Iroquoian cosmology exist; for instance, the Evergrowing Tree wampum belt which signifies the enduring nature of the League of the Iroquois (Fenton 1998:238; Tehanetorens 1972:16).

Figure 54: Glenbrook site protuberant appliqué effigy

An innovative, and relatively rare, development with respect to vessel faces at St. Lawrence Iroquoian sites are 3-D or, in other words, protuberant faces (Wintemberg 1936:149). At least two were excavated at the Roebuck site, one at the Dawson site and two from the Glenbrook site, one of the latter apparently being an appliqué (Pendergast 1981:163, 169; Pendergast & Trigger 1972: Plate VIII, figs. 1-4; Wintemberg

1936: Plate IX, figs. 25-26). Intriguingly, enough of the rim fragment from the Dawson example was present to indicate that, in contrast to general practice, it had been situated on the *inside* of the vessel (Pendergast & Trigger: Ibid.). Protuberant faces are also found on vessels created by individuals belonging to the member tribes of the League of the Iroquois; indeed, it would seem that, with increasing frequency, these faces advance from abstract representations to 3-D faces and, ultimately, to 3-D figures with limbs covered in hash marks reminiscent of the ladder motif:

> Remarkably uniform, the subject matter itself is a tightly patterned cultural expression focusing on one humanoid or a limited set of anthropomorphic representations. Further, this humanlike image could occur at only one location: on the vessel exterior at or below a castellation...The hash marks of the effigy figures were also characteristic of the 'ladder motif' found throughout the Iroquoian world...Charles Wray et al. observe that the ladder motif resembles an ear of corn removed from the 'corn ear' design (Wonderley 2004:108-109).

Another example of the artistic progression of an Iroquoian likeness, albeit from realistic to highly stylized rather than the reverse as is the case with the faces on vessels, are ringbowl smoking pipes which Sempowski and Saunders have convincingly demonstrated represent snakes (2001:245, 250; Wonderley 2005:232).

While certainly a rare occurrence, a few vessel effigy faces have also appeared on vessel shoulders rather than rims. Three examples were found in the collections of the Canadian Museum of Civilization, one from the Glenbrook site, one from the Salem site, and one excavated by the amateur archaeologist Gogo who subsequently donated it to the Museum. One striking instance from the

Maynard-McKeown site is even incorporated into the handle of a ceramic vessel. Further study would be required to make a definitive statement, but the horizontal bands situated below the face of this vessel effigy certainly seem to share a visual similarity with a common form of smoking pipe decoration.

Figure 55: Vessel shoulder effigy face from the Gogo collection

Figure 56: Salem site effigy face on a vessel shoulder

Figure 57: Glenbrook site shoulder vessel effigy face

Although variation in the depiction of vessel faces and figures is apparent, the similarities that have been maintained over time and space

Figure 58: Unique vessel effigy face from the Maynard-McKeown site

Figure 59: House 2 smoking pipe

Figure 60: House 1 smoking pipe

signify a shared Iroquoian value. These similarities include: (1) association with castellations, (2) an expressionless face, (3) crooked arms (where present), and (4) corn plant or cob imagery. This refutes the possibility of independent invention

or something akin to modern-day doodling and instead suggests that these effigies were both meaningful and that this meaning, as expressed by the effigies, perpetuated through time and across space to segments, if not whole communities, at the sites at which they occur.

It is a truism that, where issues of meaning are concerned, there is usually a relationship between the signifier and the signified (Tilley 1999:28). With regard to the faces and figures that decorate some Iroquoian vessels, the connection is hypothesized to relate to sustenance specifically and fertility generally.

Wonderley suggests that both vessel effigy faces and figures are metaphorical representations of the Cornhusk People (see also Fenton 1940:347-348):

> Diminutive beings personifying plant fertility, cornhusk people are an industrious agricultural people 'associated with planting and cultivating of prodigious food crops'…They are especially concerned with growing corn and it is cooked corn food which they crave (generally cornbread and unroasted corn mush). Cornhusk people are regarded as messengers of the Three Sisters who prophecy – quickly, because they must return home to tend crying babies – bountiful crops and many children…Their leadership is dominated by women, and the cornhusk folk are strongly linked to women (Wonderley 2002:40).

An item that is probably commonly disregarded by most archaeologists as the product of a past behaviour akin to mindless modern doodling, would actually seem to have held some significance to its makers as attested by its repeated occurrence at the Roebuck and

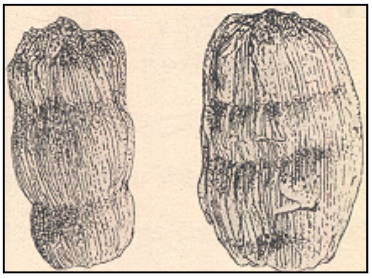


Figure 61: Wintemberg's representations of cornhusk impressed tamale-like objects excavated at the Roebuck site (1936: Plate XVII, figs. 15 & 16).

Maynard-McKeown sites, villages separated in time by approximately one century. This is a small, corn-husk impressed, tamale-like lump of clay. Two of these objects, plus a portion of a third, were excavated at the Roebuck site and one at the Maynard-McKeown site. Wintemberg interpreted them as examples of a cooking method (see also Fenton 1968:80):

> One method of baking corn is suggested by two whole lumps of burnt clay...and a fragment of another, which bear the imprint of corn leaves and look as if they may have been made by children in imitation of their elders who, perhaps, like the Mohawk described by De Vries...made cornmeal cakes similar to the leaf-bread tamales or packages of the modern Iroquois, described by Parker...and Waugh...The shape of these objects is also suggestive of Sagard's description of Huron bread, which was 'made like two balls joined together' (Wintemberg 1936:35).

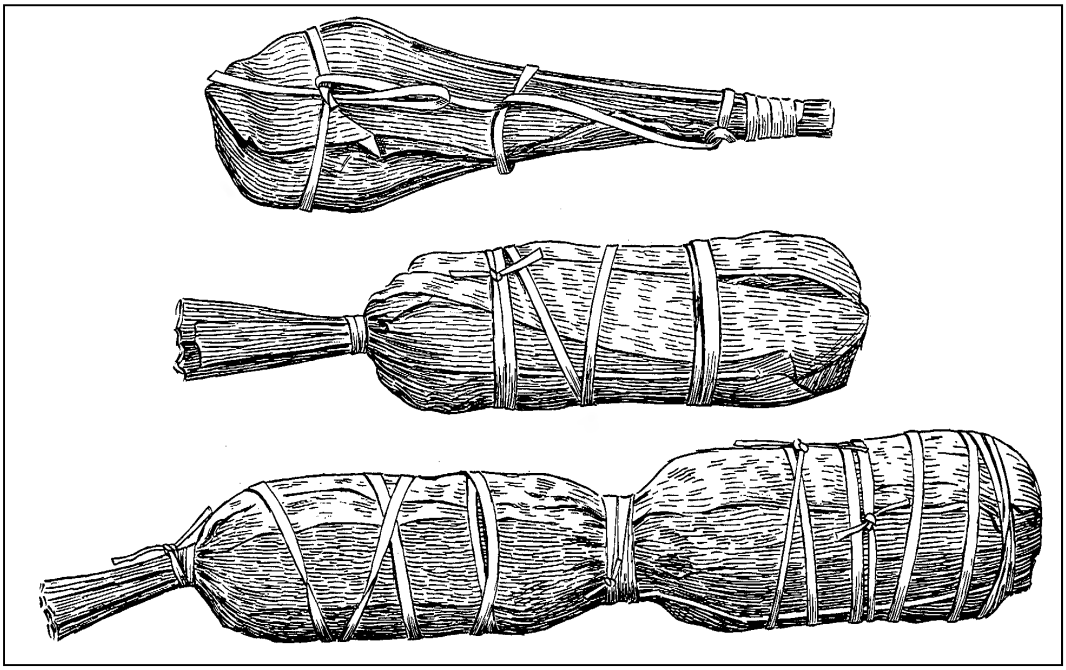


Figure 62: Waugh's representation of Iroquoian "leaf-bread packages" (1916: Plate XXXIII).

A metaphorical people like the Iroquoians would naturally view female fertility and agricultural abundance as analogous. On their own, both are

Figure 63: House 13 vessel effigy face with gouged eyes and mouth

powerful conceptions given the significance of their respective contributions to human well-being and survival. That the Iroquoians recognized the importance of women in this regard is clear, for example, in the fact that a murdered woman rated a higher blood price than a man because "…it is they who people the country, [and therefore] their lives should be more valuable to the public" (Thwaites 1959 33:243). The magico-belief nature of Iroquoian cosmology means that these attitudes would logically be reflected in mythology, ritual, and symbolism. There are certainly many myths concerning the triad of corn, beans, and squash known as the Three Sisters, just as there are associated rituals and taboos (see Jenness 1956; Parker 1910, 1989; Waugh 1916). As for the symbolism – what better place for it than on ceramic vessels that were made by women and used to cook the foods grown and tended by women (Tooker 1991:60-61; Wonderley 2002:37, 39; Wrong 1939:109)? Indeed, pots may reasonably be considered the nexus of horticultural

Figure 64: Maynard-McKeown vessel effigy face with Interior Line Horizontal Punctates. Chapdelaine has stated that this type of punctate seems to occur primarily west of Montreal Island and is, in fact, key to differentiating eastern and western St. Lawrence Iroquoians (1989).

and female fertility. The faces and figures may signify gratitude and acknowledgement of the source of bounty. This, in turn, "…may have invoked 'the good will and protection of the spirits entrusted with the feeding of a people'" (Wonderley 2002:39).

Figure 65: House 1 vessel effigy face with punctates for eyes and mouth

Thirty-three Maynard-McKeown vessels are decorated in part with the faces under discussion. Most of these were situated beneath pointed castellations, had some form of punctate eyes and mouth, interior vessel decoration in the form of angled or vertical dashes, infrequent lip decoration in the form of angled dashes or one to two horizontal lines, and were associated with incised motifs involving variable combinations of filled triangles, vertical or angled dashes, and one to seven horizontal lines. Gouges replaced punctates for the eyes and mouths of only four vessels and there were no instances of "V" shapes.

House	Interior	Lip	Exterior	Eyes/Mouth	Castellation	Technique
1	||||		||||,-(3),FT,-(3),\\\\	Punctates	Incipient	Incised
1	////	-(2)	////,-(4),FT,-(3),////	Gouges	Incipient	Incised
1			-(2),\\\\,-(1),||||	Punctates	Incipient	Incised
1	||||		////,-(3),FT,-(3),||||	Punctates	Pointed	Incised+FN
1	////		////,-(3),FT,-(3),////	Punctates	Pointed	Incised
2	////	-(1)	////,-(3),////,-(1),////	Gouges	Pointed	Incised
2	////	////	////,-(2),FT, -(2),////	Punctates	Incipient	Incised
2			////+||||,-(2),FT,////	Punctates	Pointed	DS+FN
5	||||		////,-(5),CH,////	Interior Line Horizontal Punctates	Truncated	Incised
5		\\\\	-(2),FT,-(2),||||	Punctates	Incipient	Incised
5	////	////	////,-(2),L+DL,-(2),||||	Punctates	Pointed	Incised+FN
6	||||		////,-(2),FT,////	Punctates	?	Incised
9			////,-(2),FT,////	Punctates	Broken	Incised+FN
10+12 overlap	||||	-(2)	////,-(3),////,-(2),////	Punctates	Pointed	Incised
12+17 overlap	||||		||||,-(4),FT,-(3),||||	Gouges	Pointed	Incised
13			||||,-(3),FT,||||	Punctates	Pointed	Incised+FN
13	////		||||,-(3),FT,////	Gouges	Incipient	Incised
14	////	-(2)	////,-(1),////,////	Punctates	Broken	Incised
14	////		////,-(1),FT,////	Punctates	Pointed	Incised
14		////	VL+DL+Punc	Punctates	Pointed	Incised
16	////		////,-(3),FT,||||	Punctates (Double)	Pointed	Incised
16	////		////,-(3),FT,////	Punctates (Double)	Pointed	Incised
17			////and \\\\, -(1), ////, -(1),||||	Punctates	Pointed	Incised
Outside Houses	||||	||||	||||,-(2),FT,-(2),||||	Punctates	Pointed	Incised+FN
Outside Houses	||||		||||,-(1),\\\\and////,-(1),\\\\	Interior Line Horizontal Punctates	Pointed	Incised

House	Interior	Lip	Exterior	Eyes/Mouth	Castellation	Technique
Outside Houses	||||		||||,-(3),FT,-(2),////	Punctates	Incipient	Incised
Outside Houses	||||		||||,-(3),\\\\and////,-(2),||||	Interior Line Horizontal Punctates	Incipient	Incised+FN
Outside Houses	////		////,-(7),\\\\	Punctates	Incipient	Incised
Outside Houses	||||		||||,FT,////	Interior Line Vertical Punctates	Pointed	Incised
Outside Houses			||||,-(3),FT,||||	Punctates	Incipient	Incised+FN
Outside Houses	////		////,-(4),FT,////	Punctates	Pointed	Incised
Outside Houses	||||		||||,-(1),FT,-(1),\\\\	Interior Line Horizontal Punctates	Incipient	Incised
Outside Houses			||||,-(4),FT,-(2),||||	Punctates	Pointed	DS+FN

Table 5: Summary of Maynard-McKeown data pertaining to vessel effigy faces. Attributes in the table are representational. Those describing exterior vessel motif proceed from the top of the rim to the bottom separated by a comma. The number beside a dash indicates the number of horizontal lines present. Abbreviations: CH (Cross Hatch), DL (Diagonal Line), FT (Filled Triangles), L (Ladder), Punc (Punctates), VL (Vertical Line). Under "Technique", FN denotes fingernail impressions.

Effigy Smoking Pipes and Figurine

As discussed in Chapter Three, past damage to artifacts was sometimes deliberate and, therefore, meaningful. This was the case with the ceramic vessel that, other than a small round hole in the bottom, was entire. It is also evidently the situation with several of the smoking pipes excavated at the Maynard-McKeown site. In fact, *no* pipe excavated at the site survived intact. However, intentional damage

Figure 66: Broken House 1 ceramic smoking pipe

can only be demonstrated for six pipes and one figurine fragment. With a single exception, a pipe from House 1 that was broken in at least three pieces, all of these are anthropomorphic effigies.

Figure 67: House 2 effigy smoking pipe

There can be little doubt that damage in these instances was intentional as, in the exception noted above, the pipe was broken at its strongest point and, in another, in addition to a broken stem, the effigy face had been purposefully scraped against a hard surface so that its features were virtually obliterated. Two further anthropomorphic pipes have broken noses, the faces of another two humanoid pipes were chipped away until only the mouth and nose (and a hint of the eyes in one instance) remain, and a figurine effigy is missing everything above the nose. These observations correspond with those of other researchers:

Figure 68: The back of the House 2 pipe showing the five horizontal lines

> There are some indications that effigy pipes were sacred. They are often purposefully broken and some have the face mutilated, both common practices if the spirit is to be released. Broken pipes cannot be explained by arguing that they are made of brittle materials for in some cases heads and bodies are found in different locations. Latta...reports that at the Robitaille site there appears to be 'an intentional breakage and disposal pattern' as fourteen pinch face bodies were found in middens but a 'careful search' failed to produced any heads (Mathews 1980:303).

A specific constellation of attributes are associated on two effigy smoking pipes excavated at the 15th-century Roebuck and 16th-century Glenbrook sites. Each has five horizontal lines on the back of the pipe and an anthropomorphic

effigy with a slack mouth, puffy eyes, broken nose, high cheekbones, and some sort of coronet-style headdress or hairstyle similar to examples from New York State (personal observation; see also Tremblay 2006:71; Sempowski 2004). Likewise, the effigy pipe from the Maynard-McKeown site figured above has five horizontal lines on the back, an eroded if not broken nose, and, despite the obliteration of its features, would seem to have the slack mouth, puffy eyes, and possibly the headgear of the Roebuck and Glenbrook specimens.

An effigy smoking pipe from the Salem site was noted by its excavator, Jim Pendergast, to have "a plait of five horizontal lines on the side farthest from the smoker" (1966: Plate 13, fig. 3). These bands, however, are not simple horizontal lines as is the case with the Maynard-McKeown, Roebuck, and Glenbrook examples as can be seen in Figure 70. The top of the head is irregularly shaped and may represent some sort of headgear, hairstyle, or even scalping; the eyes are hollow, the nose is indistinct, while the mouth is slack and seems to show teeth or, perhaps, a cut-out tongue. Similarly, an illustration of a Mandeville site anthropomorphic effigy pipe shows five bands of alternating decorative attributes (Chapdelaine 1992: fig. 3).

Figure 69: Salem site smoking effigy pipe

Figure 70: The back of the pipe. Notice the lack of a prominent nose

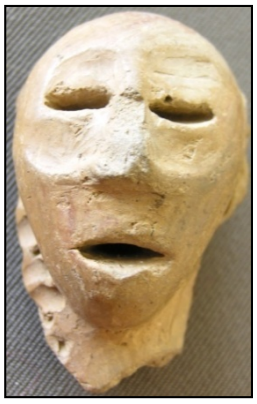


Figure 71: House 4 effigy smoking pipe

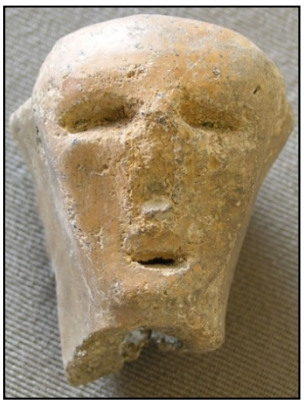


Figure 72: House 10 and 13 overlap effigy smoking pipe

Humanoid effigy pipes from House 4 and the overlap area of Houses 10 and 13 have broken noses. Traces of horizontal lines on the back of the House 4 pipe are evident but, as the back of the pipe is missing, it is impossible to ascertain the precise number that was once present. The back of the House 10 and 13 overlap pipe is intact but plain. Once again, both effigies exhibit puffy eyes, slack mouths, and high cheekbones.

Figure 73: House 2 effigy

Figure 74: Defensive trench effigy

Two nearly identical anthropomorphic effigy fragments excavated from features situated at the north end of the Maynard-McKeown site also have slack mouths. Their noses are not broken, however, and too little remains to make any determination with regard to eyes, headgear, etc.. The effigy excavated from within the confines of House 2 was found in association with several bowl and stem fragments from the pipe of which it was once a part. In contrast, the other effigy was excavated from the defensive trench without any other matching pieces. The back of this effigy is broken in such a manner that it was initially speculated that it might comprise an appliqué.

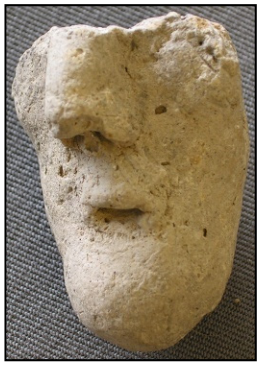


Figure 75: Effigy figurine

Finally, a portion of an anthropomorphic figurine missing the top part of its head was excavated from the overlap area of Houses 2 and 6. Like the effigies discussed immediately above, the nose is prominent and unbroken and the mouth is slack. In addition, however, it has a robust chin and the back is present but undecorated.

Effigies continue to confound scholars who seek understanding of their function in past Iroquoian society. However, the probability that they were perceived by their users as being directly linked to an animated spirit, rather than simply illustrating a fiction or *un*animated being of some sort, is demonstrated by the testimony of the Recollet, Gabriel Sagard, who related how a small carved wooden skull on his rosary was taken to be that of a "living child" (Wrong 1939:146). The Jesuits also encountered this phenomena when they placed a picture of Christ and Mary on an alter: "We had some difficulty in making them believe that these were only flat paintings, especially as these pictures were of life size…" (Thwaites 1959 15:17).

Where the subject of effigies is zoomorphic, many have thought to identify an association with clan totems. This hypothesis, however, is untenable given that some clan animals never appear in effigy form (e.g. deer) while, conversely, some animals which do are not associated with clans (Mathews 1980:297). Birds are the most common of the zoomorphic effigies, comprising approximately half their number, followed consecutively by reptiles and mammals (Mathews 1980:297, 1981:33; Noble 1979:70).

It is suggested that a commonality between all of the creatures represented on effigy pipes can be found in the fact that, in one sense or another, they are liminal. For example, birds are capable of traversing the boundaries between earth and sky, just as reptiles negotiate those between the earth and the underworld. The two mammal species that appear most commonly as effigies, bears and dogs, are associated with both the earth and Sky World. According to one Iroquoian cosmogonic tale:

> Some say that one day, as she was working in her field, she [Aataentsic] perceived a Bear; her dog began to pursue it and she herself afterwards. The Bear, seeing himself closely pressed, and seeking only to escape the teeth of the dog, fell by accident into a hole; the dog followed him. Aataentsic, having approached this precipice, finding that neither the Bear nor the dog were any longer to be seen, moved by despair, threw herself into it also. Nevertheless, her fall happened to be more favourable than she had supposed; for she fell down into the waters without being hurt, although she was with child, - after which, the waters having dried up little by little, the earth appeared and became habitable (Thwaites 1959 10:127).

Furthermore, dogs were trusted messengers to Sky World, traveling along the *Gagnenon andahety* (path of the dogs), to deliver messages to the Village of Souls where deceased Iroquoians dwelled (Wrong 1939:172).

Near the turn of the twentieth century a steatite effigy pipe from Simcoe County was identified as representing a beaver (Laidlaw 1913:12-13). Laidlaw speculated that the image might be of mythological importance and, in fact, this member of the rodent family does make an appearance in an alternate Iroquoian cosmogonic tale to that described above (Thwaites 1959 10:127-129). As for the cougars that occasionally constitute effigies, it has been stated that this powerful feline habituated deep water and was equated by Iroquoians with meteors (Hamell 1998; Mathews 1980:297). As such, it could be said to be doubly liminal. Not

only could it traverse the earth, but it could move across the sky and under the water as well.

The hypothesis that the animals represented on smoking pipes are liminal between earth and the Sky World or the Underworld also accords with the assertion of one scholar that anthropomorphic effigies, which greatly outnumber zoomorphic effigies (between A.D. 1500 and 1540, according to Noble, and between A.D. 1425 and 1550, according to Mathews), similarly signify supernatural beings, including guardian spirits (Chapdelaine 1992: 34-35; Mathews 1980:297-298; Noble 1979:81). Mathews premises her argument on the fact that many humanoid effigies exhibit non-human traits such as horns and multiple heads or faces but the Maynard-McKeown and extended Prescott cluster sample indicate that there are additional reasons to suggest this (Mathews 1980:298).

First, it is clear that many effigies, like iconographic figures from other cultural traditions (e.g. Buddha, Christ), were crafted and subsequently treated according to a standard protocol. If they had been intended to represent ancestors, it would be expected that each effigy would be distinct. There is absolutely no doubt that ancestors were important in Iroquoian society – in fact, it has been said that if the village and the cemetery were both on fire all effort would be expended first on saving the cemetery – but the fact that more than one effigy of a type occurs over space and through time contradicts the possibility of ancestor representation in this instance (Thwaites 1959 39:31; Wrong 1939:209). For example, the previously described anthropomorphic effigy pipes decorated with

five horizontal lines have been identified at three separate St. Lawrence Iroquoian sites dating from the 15th to the 16th-centuries. In fact, these particular pipes make it sorely tempting to look to Iroquoian folklore for an explanation concerning the identification of the supernatural personage represented. The broken noses, and those of the other two effigy pipes discussed, inspire consideration of the tale of Hadu?i?, "…the hunchbacked master of winds, patron of disease, gamekeeper, and tutelary of the False Face Society", who tested his abilities against those of the Creator Iouskeha (Fenton 1998:45-46):

> The two engage in a test of power at moving a mountain while holding their breath. The impetuous Hadu?i?, tries first and succeeds in moving the mountain halfway, but in avid curiosity to see Sky Holder's success he turns to look and smashes his nose against the mountain, which has come up behind them, and thereby loses the contest. The forfeit requires a promise not to harm people and to rid the earth of disease in return for the privilege of abiding on the margin of the earth, to come when called, and to coach the False Face Society, whose members shall call him "our beloved grandfather". Hadu?i? agrees to convey the power to cure disease to men who wear masks and impersonate him in return for man's gift of tobacco, which he craves. The contract holds so long as men keep up the ceremonies (Fenton 1998:46).

Unfortunately, in the absence of further corroborative evidence, such a suggestion can only be considered tenuous in the extreme.

Figure 76: A trumpet pipe decorated with five horizontal bands

Second, the fact that several of the pipes discussed were decorated with five horizontal lines also offers support for Mathews' hypothesis that these humanoid effigies represent supernatural, rather than natural, beings. Past Iroquoians, as already observed, were preoccupied with metaphor and number symbolism

is simply one means, albeit one often resorted to in Iroquoian society, of expressing this. They associated the number five with the supernatural and, specifically, with supernatural communication (Wright, J.M. 1999). For instance, after spending some time in a sweatbath and throwing tobacco on a fire, both activities thought to aid spiritual communication, a Wendat medicine-man was said to have determined that a woman's illness was caused by five men represented by five tokens of witchcraft in her body (Thwaites 1959 13:31). Ethnographic evidence demonstrates the continuity of such attitudes. For example, "The killer of five deer was considered very subtile and more than commonly endowed with the powers of enchantment..." (Hewitt 1889:166). Even more to the point is the fact that the White Dog, itself associated with supernatural communication, was sacrificed on the fifth day of the annual Thanksgiving ceremonies (Morgan 1993:207).

The third, and perhaps most important support for the interpretation of anthropomorphic effigies as representations of beings from Sky World, is the fact that the pipes were used to smoke tobacco. It is certainly not an exaggeration to state that, in the same way that food sustains the body, the Iroquoians felt that tobacco fed the spirit. Moreover: "The fact that almost all human figures on pipes face the smoker and occupy a place between the smoker and the tobacco would seem to be significant since tobacco, among the Iroquoians, was and is the intermediary between man and the supernaturals" (Mathews 1979:47).

Nicotiana rustica contains four times the amount of nicotine found in the species of tobacco (*Nicotiana tabacum*) used in commercially available cigarettes

and is fully capable of inducing hallucinations and, ultimately, even loss of consciousness (Brown 1997:474; Heiser 1987:161; Mathews 1980:304; Plotkin 1993:232). The 16th-century missionary to the Aztec, Bernardino de Sahagun, described its effects as follows: "It intoxicates one, makes one dizzy, possesses one, and destroys hunger and a desire to eat" (Sahagun quoted in Furst 1995:120). When asked why they smoked tobacco, the Wendat responded that "The smoke…gives them intelligence, and enables them to see clearly through the most intricate matters" (Thwaites 1959 10:219). It "…deadens the senses and ascends to the brain" (Wrong 1939:121) and "gives them…enlightenment amid the difficulties that present themselves" (Thwaites 1959 15:27). Quite simply, as a Seneca explained to a Frenchman, "Good thoughts come while smoking" (Fenton 1998:22). According to the linguist John Steckley:

> …we have the word for spirit – oki – used with the verb *',a,entennion*,' meaning 'to make dizzy'…which can refer to mental states achieved through drinking wine, chanting, dancing or delivering a rousing speech. The combination here is probably saying that strong tobacco can induce a state of trance in which an individual either travels to meet an oki spirit or is possessed by one (Steckley 1985:15-16).

Nicotiana rustica was not for the exclusive use of medicine-men but rather constituted an integral feature of all aspects of Iroquoian social and political life (von Gernet 1992:172, 178). It might be smoked, burned on a fire, or simply deposited in some nook or cranny in order to facilitate communication with spirits or acquire their beneficence with respect to an upcoming journey, fishing, planting, and so on (Thwaites 1959 10:159, 165-167, 13:31, 259-261, 23:55; Wrong 1939:171, 189, 198; Mathews 1978:159). It was routinely smoked during councils (Thwaites 15:27; Wrong 1939:150), offered to guests as an act of

hospitality (Wrong 1939:88), and was generally thought to aid digestion (Wrong 1939:88) and "appease the passions" (Thwaites 10:219). In fact, when their guest Gabriel Sagard declined to smoke because he did not wish to become habituated to tobacco, the Wendat were astonished "because there is nobody in all those countries who does not take it and use it in order to warm the stomach in default of wine and spices" (Wrong 1939:88). Indeed, tobacco was such a central feature of Wendat society that potential Christian converts invariably questioned the Jesuit missionaries closely about its availability in heaven before agreeing to be baptized (Thwaites 1959 17:127). Despite the spiritual nature of tobacco, its inclusive use in Iroquoian society should not be viewed as surprising because every human – and, indeed, all of the earth's living creatures and even some things Western culture would deem inanimate – was believed to possess the supernatural power called *orenda* (Mathews 1976:22).

Once a pipe had been used, it is unlikely that its supernatural association continued as, for example, the "haphazard way they were discarded [at the Mandeville site]...in the midden, along with other pipes – suggests that they were not necessarily sacred, or at least that once broken they lost any special value" (Chapdelaine 1992:35; Tremblay 2006:70).

Further Thoughts

A correspondence between a smoking pipe excavated at the Maynard-McKeown site and a ceramic vessel fragment from the Roebuck site has been identified. As upwards of a century separates the two villages, this would seem to signify a lasting and, therefore, important concept in Iroquoian cosmology.

Possibly, the presence of the arch but the absence of the figure(s) indicates that they are metonyms for Figure-In-Arch effigies (Tremblay 2006:128-129): "This type's design comprises a humanlike face or figure within an arch. Usually one person is indicated, although a group scene exists. We generally see two or three nested arches" (Wonderley 2005:218). Both types have variously been interpreted as depicting the sky dome, acting as fertility symbols or signifying orenda transfer (Hosbach 1992; Parker 1912:613-614). In particular, however, Richard Hosbach, a medical doctor by training, favours the view that these pipes reflect dual male and female reproductive traits and, further, the interpretation that they signify the birth of the League of the Iroquois (Hosbach 1992).

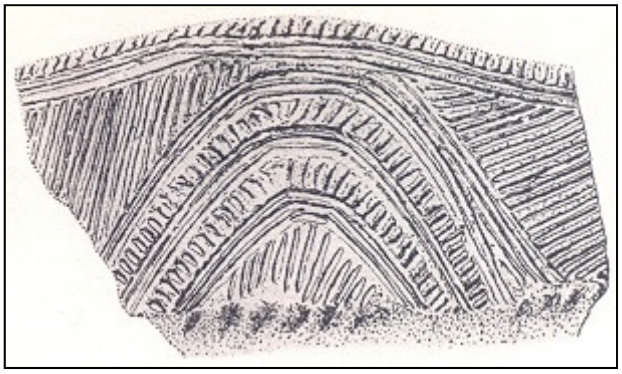


Figure 77: Pottery rim fragment excavated by Wintemberg at the Roebuck site (1936: Plate V, fig. 4)

Figure 78: House 1 smoking pipe

Excluding juveniles, of the non-effigy pipe fragments of sufficient size to determine form, one was of the Arch type as seen in Figure 78, one was vasiform, three were barrel-shaped, nine were conical, and twelve were trumpet. Of these, sixteen had no decoration, nine had horizontal decorative attributes (1 (1), 2 (1), 3 (1), 4 (3), 5 (1), 7 (1), or 10 (1) lines), and seven had punctates or

short angled incisions. Fifteen of these pipe fragments were excavated from features outside of longhouses and twelve were retrieved from intra-longhouse pits.

The Maynard-McKeown smoking pipe sample is, thus, quite small. The Mandeville site consisted of five longhouses and yet produced an astounding three hundred and sixty-five smoking pipes inspiring as yet unresolved speculations concerning the spiritual, political, and social activities of its inhabitants (Chapdelaine 1992:31). Even Wintemberg's excavation of the Roebuck site, the St. Lawrence Iroquoian settlement situated closest to the Maynard-McKeown site, produced an incredible seven complete pipes and 755 pipe fragments (Wintemberg 1936:76-77). Some of this may be attributable to determinations of what constitutes an analyzable fragment, or even the possibility that Wintemberg did not differentiate between analyzable and unanalyzable fragments, but it is far more likely that the Maynard-McKeown sample is so much smaller than those from Mandeville and Roebuck for the simple reason that no middens were excavated at the site in contrast to the other two sites (Chapdelaine 1989:70, 94; Wintemberg 1936:4-7). Despite concerted attempts to locate middens at the Maynard-McKeown site during its excavation in the summer of 1987, none were found and, consequently, data from this particular type of feature is sadly unavailable.

Cognitive research involving newborn babies indicates that human faces provide a common point of fixation despite the fact that their visual acuity is not

fully developed (Koch 2009:20). Thus, the importance of faces to the human psyche is expressed at an age when some biologists would question whether we are even as yet truly aware of ourselves and the world in which we live (Ibid.). It is not surprising then that, once we are fully conscious, humans continue to gravitate to faces. Religions around the world illustrate the significance of faces within the context of their associated pantheons (both good and bad). One characteristic common to such representations is a level of detail sufficient to leave little doubt as to the identity of the entity illustrated. Examples include some images of the Buddha that show his head covered with snails, the Christian Satan depicted with horns, and the Iroquoian Hadu'i' with his characteristic crooked nose. The identification at Iroquoian sites of constellations of attributes associated with faces on ceramic vessels and of others on smoking pipes indicates that specific beings are respectively depicted. This may be seen to be particularly true of the faces on vessels as they are found on sites widely dispersed across space and through time, thus signifying the continuation of common belief in at least one spirit. The same is probably also true of the type of smoking pipe which, among other features, was decorated with five horizontal lines on the back and was excavated from several St. Lawrence Iroquoian sites spanning at least a century. Further study may extend this spatial and temporal observation. The same is true of the other pipe fragments excavated at the site. As damage was seen in several of these to be meaningfully consistent, this might be a good starting point when looking for similar phenomenon further afield.

CONCLUSIONS

In the Introduction, a paradigm termed the Gamble of Life was introduced to explain historical and ethnographic evidence indicating that past Iroquoians had adopted a cosmology centred on the tenuousness of human and horticultural vitality and the view that both could be reinvigorated through warfare and its accompanying socially instituted practices of adoption, torture, sacrifice, and – belatedly – scalping. Thus is explained Iroquoian belief in the existence of a supernatural entity whose responsibilities included both war and fertility (Trigger 1985:97). Indeed, it has been suggested that the entire complex of Iroquoian warfare was closely tied to the development of this horticultural people (Tuck 1978:330). Certainly, warfare was conceived as socially sustaining: "...by returning prisoners for adoption and replacement of losses, it sustained or increased the population. Warfare was embedded in mythology, it drew strength from the sun [the god of war], and it enjoyed the sanction of ritual" (Fenton 1998:260). It would also seem that this association of fertility and war was widespread in the Americas:

> It is in the Aztecs' consistent, sometimes desperate, ritual search for plant regeneration that we gain some access to their understanding of the nature of human existence. They were a people obsessed with the structured nearness of death, but who also possessed the ritual techniques to manipulate, dance with, and periodically transform death into the forces of life. Those sacrifices, referred to as nextlahualtin (the debt repayments), were the ritual magic to this mystery of metamorphosis. The sacrifice of women, as much as any other kind of sacrifice, dramatized for their priests and citizens and served up to their gods the hope that they could use ritually controlled death to regenerate their plants, their children, and even the forces of war, which brought death to their enemies (Carrasco 1999:190).

A link between Aztec and Iroquoian sacrificial practices has been made by previous researchers (Knowles 1940:215; Trigger 1981:34). One aspect of some of these rites included flaying (Sahagún 1950-1982 II; Carrasco 1999:140). It is possible, then, that a reference in the *Jesuit Relations* to the substitutability of a captive's clothing in place of his life is relevant in this regard (Thwaites 1959 42:159-161). Certainly, Hewitt and Curtin stated that "The living and inflated human skin, flayed entire, serving as a guardian or watchman for its owners and the strawberry patch, appears in a number of other recitals" (1918:792). In later years, this concept seems to have been applied to dog sacrifice (Wright, Joyce M. 2004).

A secondary effect of the acquisition of souls for one's own population was the diminishment of the vitality of enemy populations. The relatedness of these aspirations helps to explain certain behaviours linking sustenance and war apparent in the archaeological record. For example, at the late 15th to early 16th-century New York State Alhart site, the heads of fifteen men were found in a food storage pit with carbonized corn (Williamson 2007:213). Similarly, and reflecting historic evidence that the Wendat and St. Lawrence Iroquoians had been enemies, Jim Pendergast proposed that the double vessel burial from House 13 involved the metaphorical "ingesting" of a Wendat pot by a St. Lawrence Iroquoian vessel and, therefore, of the St. Lawrence Iroquoian people doing the same to the members of the Wendat confederacy (Pendergast 1988:16-17). This is a particularly potent metaphor when it is considered that ritualistic cannibalism was practiced by Iroquoians at this time (Wright, J.V. 2004b:1277, 1283, 1392). It also illustrates a

precedent for equating pottery vessels and populations. Member tribes of the League of the Iroquois perceived their confederacy as akin to a longhouse so correlations between material objects or structures and human society are far from atypical in Iroquoian culture (Fenton 1998:24).

But warfare was only one aspect of the balance that was perceived as maintainable through the combined efforts of men and women utilizing different skills and directing their respective destructive or creative powers toward the common goal of social fecundity. Given indications in the extant literature that much of this cosmology was classified according to the opposing dualities of men and women, destruction and creation, hunting and horticulture, as well as extra-societal influence and intra-societal influence, it was reasoned that some reflection of these would be visible in the archaeological record. For example, other scholars have observed that "Life and ceremonies are often based on dualistic divisions...Hewitt...emphasizes the antiquity and continuity of the dualism of 'male and female principles' stressing their importance for fertility. Iroquoian myths and legends abound with dualistic themes" (Mathews 1981:13). Thus, premised on the expectation that they would be more materially apparent, emphasis was placed on the dualities of which the cosmology was comprised rather than the complementarity intrinsic to it.

Unexpectedly, and on several different levels, it was the complementary aspect that predominated. For instance, it was apparent in some ritual features that male and female material culture had been mixed rather than kept separate, as expected. As discussed in Chapter Three, ceramic vessels were arguably made

and used by women, double pot burials were clearly associated with women and children in mortuary contexts, and the only reported burial inclusion at the St. Lawrence Iroquoian Roebuck site included a vessel with a woman (Gramly 2000:6, 45; Sempowski et al 2001 pt. 3: Appendix B; Wintemberg 1936: 117, Plate XI; Wray et al. 1987: Appendix B, 1991: Appendix B; Wrong 1939:109). Yet, the ritualistic burial of double pottery vessels in House 9 also contained, among a variety of other items, objects traditionally associated with men; namely, chipping detritus, stone, and quartz crystal.

Additionally, it was found that there are discrete artifacts that also incorporate evidence of the two genders. The most notable of these are the gyneco-android smoking pipes described by Dick Hosbach as depicting both male and female genitalia (Hosbach 1992). Another example are wampum belts with their white (female) and purple/black (male) marine shell beads (Parker in Fenton 1968:46). Not incidental to the present discussion is Parker's related observation that black symbolized death and, hence, the destructive force accorded Iroquoian males in the cosmology under consideration.

Furthermore, the purification structures discussed in Chapter Five also offer evidence of the different yet mutually supportive roles, abilities, and powers of men and women in Iroquoian society. Despite the fact that sweatlodges are consistently described in the historic literature as having been used by men, both sweatlodges excavated at the Maynard-McKeown site produced evidence of pottery vessel fragments. Similarly, House 3 is argued to have functioned as a woman's house yet two small fragments of smoking pipes were found within its

confines. Scholars have frequently noted what is generally interpreted as the *subsequent* use of sweatlodges as refuse areas yet, given the increasingly apparent harmonizing effect of male and female roles in Iroquoian society, it is *possible* that the pottery fragments in the sweatlodges and the pipe fragments in the proposed women's house were intentionally included as symbolic tokens of the companion role of the absent gender. Indeed, according to Robert Hall, sweatlodges are themselves uterine metaphors (Hall 1997:125-126).

Since the destructive nature of time has resulted in only certain types of material items surviving, it is quite probable that further evidence of gender admixing with respect to artifacts, ritual features, and architecture has simply disappeared from the archaeological record. Fortunately, however, the fundamental complementarity and purpose of Iroquoian cosmology can also be seen in archaeological evidence reflecting the related concepts of sustenance, fertility, and regeneration.

The most obvious material manifestation of Iroquoian views concerning sustenance are pottery vessels. In Chapter Six, they are described as the nexus between horticultural and human fertility because they are used to transform the raw products of hunting and horticulture via the process of cooking into the food that sustains the people. In this they share a similar role with the women who make and use them as, by giving birth to children, they too sustain the population. It is largely due to a recognition of the parallels between women and food vessels that scholars have interpreted the faces that occur beneath the castellations on some vessels as symbolic representations of the mythological Cornhusk people

who were agents of the Three Sisters, the spiritual triad responsible for the vegetable staples of the Iroquoian diet: corn, beans, and squash (Fenton 1940:347-348; Wonderley 2002:40). In 1909, Arthur Parker described a society of women:

> …whose special duty is to offer thanks to the spirits of the corn, the beans, and the squashes, Dio'hē'ko (these sustain our lives). By their ceremonies of thanksgiving the Towii'sas propitiate the spirits of growth, and people are assured of a good harvest. The Towii'sas have a ceremonial song and a march, but no dances. The legend of the society relates that the entire band of Towii'sas, in the latter part of the seventeenth century, was captured by the Cherokee and carried down the Ohio river. Thereafter two men were admitted as escorts in their march through the woods. At the closing of the ceremony the head-woman chants the Dio'hē'ko song as she leads her band about a kettle of corn pudding. She carries an armful of corn on the cob; in her right hand she holds some loose beans, and in her left some squash seeds, the emblems of fertility (Parker 1909:179).

Although the concept of fertility was of central importance to all Iroquoian people, the fact that faces, faces with arms, and full figures on ceramic vessels tend to cluster in time and place beginning with the 13th-century Early Ontario Iroquois stage in southern Ontario (apart from a single Owasco example) while virtually exploding on 14th to 16th-century St. Lawrence Iroquoian sites in southeastern Ontario and southwestern Quebec and continuing in like manner on northern United States League of the Iroquois sites to the 17th-century, is suggestive of a cult and, perhaps, the movement of a people as well as their ideas (Abel 2001:114; Clermont et al. 1983:86, 109; Engelbrecht 2003:86-87; Pendergast 1962:27, 1969:41; Sempowski & Saunders 2001:159-160; Tuck 1971:155; Wintemberg 1936:107-108; Wonderley 2002:27, 40, 2004:107-111, 2006; Wray 1973:12; Wray et al. 1987, 1991:100). With regard to the possibility of migration, it is perhaps relevant that the 13th-century was a time of conquest in southern Ontario as it was for the St. Lawrence Iroquoians in the period leading

up to their ultimate cultural dissolution in the 16th-century (Wright, J.V. 2004b:1235, 1966). Yet, if it is true that the occurrence of the faces over space and time reflects the movement of people, this means that it was the aggressors (or, at least, some of the aggressors) of the Early Ontario Iroquois conflict that journeyed so far from home as the faces have been observed on pots from Pickering sites and it was the Pickering people who ultimately subjugated the Glen Meyer people (Wright, J.V. 1966). While not impossible, such an explanation seems somewhat counterintuitive. Nevertheless, the likelihood of a connection between St. Lawrence Iroquoians and Pickering has previously been broached, despite the fact that some Quebec archaeologists now favour St. Lawrence Iroquoian *in situ* development "...out of an assemblage called the Melochville complex and its descendants" (Chapdelaine 1980; Pendergast 1975:47; Wright, J.V. 1990:500, 2004b:1391):

> …a northeastern expansion of the Pickering culture appears to have laid the cultural base for the eventual development of the St. Lawrence Iroquois. In other words, some time prior to 1300 A.D. the same culture that was eventually to give rise to the Huron, Petun, Neutral, and Erie to the west also was the cultural foundation from which the St. Lawrence Iroquois would evolve. Although possessing a culture basically similar to their western kinsmen, the St. Lawrence Iroquois were to develop in a locally distinctive fashion (Wright, J.V. 1972:87).

Despite a fair degree of homogeneity in the appearance of most of the faces and figures throughout Iroquoia, regional differences do seem to be detectable. For instance, in southern Ontario, face motifs with "V" shapes and gouged eyes and mouths predominate whereas punctate eyes and mouths and filled triangles are more common on St. Lawrence Iroquoian sites. In addition, the presence of the ladder attribute in association with this motif tends to occur

more frequently on sites east of the Prescott cluster of St. Lawrence Iroquoian sites.

Although women held ultimate authority over the cooking and distribution of food, men matched the contributions of women to the overall sustenance of society by procuring wild meats via hunting (Hastorf 1991:134; Prezzano 1997:90). In fact, venison, the most common wild meat evident in Iroquoian faunal records, has been said to have been perceived by Iroquoians as "balancing the 'three sisters' (corn, beans, and squash)" (Fenton 1998:102). Thus, as Trigger has stated, "Instead of Iroquoian economies being controlled by women, they appear to have been a delicate balance of mutual obligations between men and women that was maintained by a strict sexual division of labor" (1978:60).

Given the critical role of deer in the Iroquoian diet and the cosmological interplay of sustenance and fertility, it is unsurprising that antler was selected for carving "in the shape of a phallus" at the Roebuck site (Wintemberg 1912:502, 1936:21, 88, Plate XVII (fig. 24). The form, the medium, and the fact that antlers appear on deer in advance of the mating season all strongly suggest a theme of fertility. Human fertility, it is suggested, was logically conflated with that of plants and animals: "The world view of the Indian did not sharply distinguish between the refleshing of the bones of game animals respectfully treated, the reincarnation of the Indian in the Indian's turn, or germination and the appearance of life in buried seeds" (Hall 1976:363). This helps to explain, for instance, the association of young people with tokens of animal fertility in the form of the *os baculum* of bear and raccoon in mortuary contexts, objects that were also

excavated at the Roebuck site and other Iroquoian sites dating back to the Owasco period (Canadian Museum of Civilization Archival Document 22a, File1; Sempowski & Saunders 2001:102-103; Wonderley 2006:12). The youthful vitality of these individuals had withdrawn from the world and an attempt to redress the unfortunate ramifications of this situation for the society at large included interring the juveniles with symbols of animal fertility. Historic evidence from two separate sources, one authored by a Recollet and the other by a Jesuit, of a similar response to the threat of death can be found in the Andacwander ceremony, a fertility rite involving the mating of numerous youth for the purpose of restoring health in the face of mortal illness (Thwaites 1959 17:147; Wrong 1939:120).

Juvenility, thus, signified a social vitality that was perceived as a potent antidote to death or the threat of death. Indeed, there is abundant archaeological evidence that juvenility, whether human or animal, was an attribute selectively sought for inclusion in a variety of rituals. For instance, both the bear burial and at least one of the beaver burials excavated at the Maynard-McKeown site (the faunal report does not provide pertinent information on the other beaver burial) were juveniles. This is not at all an uncommon occurrence on Iroquoian sites. For example, a juvenile bear was also interred in a feature at the nearby Beckstead site and a house at the Middle Ontario Iroquois Nodwell site contained a variety of juvenile animal burial features (D'Andrea et al. 1984:212; Pendergast 1984:85; Wright 1974:88-89). Similarly, several of the human parietal rattles from the Roebuck site were made from the crania of children (Wintemberg 1936:74).

Regeneration, the concept whereby the life-force of people, plants, or animals that had passed from Turtle Island was reclaimed, is a persistent theme in many of the artifacts and features uncovered at the Maynard-McKeown site. The presence of the human parietal rattle accords with the warfare aspect of Iroquoian cosmology. As George Hamell and others have observed, the taking of enemy heads was for the purpose of capturing the souls of the men to which they belonged (Engelbrecht 2003:43; Fenton 1998:259). As discussed in Chapter Three, one such rattle was found inside a sweatlodge at the13th-century Moatfield site while another was excavated from a midden at the Roebuck site where it had been placed beneath the bodies of five individuals (Williamson 2007:203; Williamson & Pfeiffer 2003:33-34; Wintemberg 1936:5, 118-119). In the first instance, mythological evidence and the context of human burials in or near sweatlodges indicates that they, too, signified regeneration. Likewise, middens, far from being the bleak and smelly mounds of waste many people today probably imagine them to be, would have existed as verdant intra-village oases productive of edible fruits like squash from the scant remains of past meals; hence, they, too, would have represented regeneration.

Closely associated on a metaphysical level with sweatlodges are, as discussed in Chapter Five, ossuaries. Common to both is evidence of: (1) secondary burials; (2) circular construction involving wooden posts and coverings of bark and/or hide; (3) central rocks; (4) mythological and historical corollaries pertinent to an interpretation of rebirth; and, (5) turtle associations evident in feature appearance and/or artifact inclusions. Some of Ontario's mounds dating

to Pickering times have also produced evidence of human burials, a central fire, and turtle associations (Boyle 1897; Johnston 1968:24, 1979:96; Kenyon 1986:12-13, 88). Although not constructed in the same manner as ossuaries and sweatlodges, they share the same general mound shape which is also common to the practice of planting corn, beans, and squash in hillocks and which are likewise associated with central heating rocks and burial insofar as Iroquoian cosmogony accounts for the origin of these life-sustaining plants on the grave of the Creator's mother (Engelbrecht 2003:22; Waugh 1916:16; Wonderley 2004:173). Notably, the apparent association between mounds and regeneration would seem to be widespread in the Americas as it has been observed that "...the mound icon has been symbolically linked to agricultural and fertility themes involving world renewal rituals, effectively typing it to Cahokian representations in other media" (Emerson & Pauketat 2008:175).

Also discussed in Chapter Five was a longhouse that is hypothesized to have once functioned as a special purpose structure for the use of women during menstruation and birthing. Considered unusual from the time of its excavation because of its size, hidden situation behind a larger house and adjacent to the palisade, and for having only two hearths and no bunk lines, further analysis has only contributed added to this impression. For instance, the faunal report records an unusually small amount of bone and none whatsoever attributable to avian species. It was also found that there was no chipping detritus in the house and, in fact, only one groundstone item – a metate which is a tool traditionally used by women to grind corn.

Shell, according to George Hamell, was perceived by Iroquoians as "resuscitating" (Hamell 1983:6). This interpretation is consistent with contextual data pertaining to two particular instances of shell use at the Maynard-McKeown site: (1) the occurrence of wampum in what has been predicted, on the basis of archival evidence, to have been the village cemetery on the property adjacent to that on which the village itself is situated, and (2) with the House 9 double vessel burial, a feature that likely constitutes the material remains of a ritual concerned with sustenance given the presence of pottery vessels, garden hoes, bone awls (equivalent to our forks), and shell valves. In the first instance, the subject of regeneration is the human populace whereas, in the second, it is the means of sustaining that population (food).

The concept of regeneration was also seen in the ritual feature that contained two snakes. Generally speaking, snakes were despised in Iroquoian society; however, the ability to shed their skins and traverse the earth, the underworld, and sometimes the water, revealed that they had a significant amount of the power Iroquoians termed *orenda*. Reflections of the import of snakes have, to date, only been glimpsed at Iroquoian sites. For example, extant evidence includes snake effigy pipes, of which Mathews has stated the double snake variety are unique to eastern Ontario, and two snake jaws excavated from a Seneca site midden (the occurrence in the midden once again reinforcing the interpretation of regeneration). A rite in which a medicine-man wore a snake skin wrapped around his head has been documented historically and there is abundant evidence concerning the role of snakes in Iroquoian mythology (Mathews 1981:17). The

scarcity of archaeological evidence of snakes, therefore, suggests the possibility that recovery techniques have generally not been up to the task of retrieving small items like snake jaws and bones or, alternatively, that ritual features involving these items are exceedingly rare.

Finally, although no evidence of such was found at the Maynard-McKeown site as there was no opportunity to excavate human burials, the regeneration principle under discussion here is also reflected in historic evidence that deceased infants were buried beneath pathways in the hope that they would requicken in the bodies of passing women (Thwaites 1959 10:273).

Just as Iroquoian cosmology was constructed around the pairing of men and women so, too, was a relationship between Turtle Island and Sky World judged to exist, thus explaining the inseparable character of the natural and the supernatural in much of Iroquoian ritual and material culture. For example, it has been said that:

> The timing of the Midwinter Ceremonies with the zenith point of the Pleiades brings to light deep-hidden associations. The people are believed to be dancing on earth when the line of communication with the sky realm is open directly above and while the sky spirits are also dancing. From this point we may trace the earth-sky correspondence in the performance of living beings and spirits – a conceptual starting point in the study of native religious philosophy in eastern North America...(Speck 1949:51).

A great deal of the material culture excavated from the Maynard-McKeown site reflects this perceived rapport between human and spirit. For instance, the supernaturals depicted on the previously discussed vessels with faces are but one example of the representation of spiritual beings on Iroquoian material culture. Smoking pipes are another. In contrast to scholars who have sought clan

or other explanations for the choice of subject matter represented on effigy smoking pipes, Zena Pearlstone Mathews has inclined toward the view that they depict supernatural spirits (1980). Two of the compelling arguments she provides in support of this include the fact that some clan totems have never been found illustrated on an effigy pipe and, additionally, many animals that are so illustrated are not clan totems (Ibid.). Also, a significant percentage of effigy pipes depict humanoid figures, often with horns or other non-human features, rather than animals (Ibid.).

As discussed in Chapter Six, Mathews' interpretation is further supported by evidence from the Maynard-McKeown site and other Prescott cluster St. Lawrence Iroquoian sites of an apparent standardization in human/humanoid effigy pipe crafting over time. The near identical nature of some of these representations over the course of a century, therefore, is not in accord with an alternate hypothesis of ancestor depiction. Furthermore, it was discovered that it is not just that certain pipes share a similarity in appearance but that they were also subjected to similar types of damage. For example, a pipe from the Maynard-McKeown site, like specimens from the Roebuck and Glenbrook sites, was devoid a nose that had once clearly been present. This was also true of two other Maynard-McKeown pipes. Likewise, two remarkably similar effigies from the site had been chipped around the face in the same manner. It is suggested that the reason all of the smoking pipes at the Maynard-McKeown site, and most of those from other Iroquoian sites, are broken is because they were vehicles of communication between Turtle Island and Sky World which, once ceased,

required the connection to be terminated.

Two other instances of intentional damage observed at the Maynard-McKeown site include a ceramic vessel that was complete except for a small hole in the bottom and a ritual feature in which deer long bones had been perforated at their proximal ends. An interpretation of soul release was offered in both instances. This would seem counterproductive to Iroquoian cosmology as discussed so far; however, historic evidence indicates that enemy human and canine sacrifices were offered where a threat against the population was perceived. Since the pot was retrieved from a ritual feature interpreted as pertaining to sustenance and the deer feature can be likewise assessed given the importance of this animal to the Iroquoian diet, it can be argued that they constitute offerings in the hope of a return that would sustain the larger community. Sacrifice for this reason is probably also pertinent to an understanding of the many animal interments at the site. In any case, it is clear that damage to Iroquoian material culture was intentional in some instances and, therefore, can be a meaningful attribute worthy of examination.

The explanation for what has turned out to be a clear lack of evidence for clan longhouses as identified by decorative pottery attributes and motifs could simply be that too little of the village was excavated during the summer of 1987 to make such a determination. Still, even if it is impossible to know at this point whether vessels from the rest of the village would indicate significant differences such as those initially hypothesized to pertain to clan membership, the present study has clarified the relevance of clusters of longhouses in this regard. Quite

simply, there is no evidence to support the association of similarly oriented longhouses on the basis of the pottery vessel fragments they contain. They might be clusters of clan longhouses, just as the local Cleary and VII/7 sites might represent the hamlets of different moieties, but pottery vessels are not able to demonstrate such a relationship.

The discovery of a smoking pipe at the Maynard-McKeown site and a ceramic vessel fragment from the century older Roebuck site depicting what would appear to be a remarkably similar double arch, suggests another possibility. This motif, discussed in Chapter Six, has been variously interpreted by scholars as illustrating the dome of the sky and/or signifying fertility and/or orenda transference (Hosbach 1992; Parker 1912:613-614). These are all concepts of central import to the Iroquoian people. In conjunction with the interpretation afforded the faces and figures that appear below castellations on some ceramic vessels, the possibility is presented that ceramic vessel decoration, like that of effigy smoking pipes, may have had more to do with cosmology and cosmogony than group identification like clan membership. Most vessel decorative attributes are abstract but, as Sempowski and Saunders have convincingly argued, ringbowl smoking pipes may be part of an evolution involving the abstraction of what originally was a snake (Sempowski & Saunders 2001:245; see also Wonderley 2005:232). The same could be true of other vessel and pipe decorative attributes. Certainly, abstract shapes held meaning with regard to wampum: "Oblique lines are said to designate confederation; slanted lines, the alliance of longhouse units; ovals, the tribal council fire; squares or parallelograms, towns or nations; a white

line through the belt, a path; linked diamonds, friendship; and the tree of peace, the League itself" (Ceci 1982:105). If the same phenomenon can be demonstrated to be pertinent to the interpretation of pottery motifs, it is possible that the reason pottery motifs seem to demarcate spatial areas peculiar to individual tribes and tribal confederacies could be due to slight differences in the origin tales of the respective tribes and, consequently, of their material expression (Fenton 1998:35 n.2).

The Maynard-McKeown site dates to the early 16th-century and, as such, falls into that period of time immediately preceding the dissolution of the entire St. Lawrence Iroquoian population. Whether their disappearance will ultimately be conclusively attributed to the Wendat, the League of the Iroquois, or both, the multiple lines of defensive palisades and the trench(es) that surround the village clearly indicates that the conflict was already well under way while the site was inhabited. For awhile, their cosmology, prioritizing as it did social and natural abundance, assisted their survival. Eventually, however, the war kettle was jostled from its place and the sacred pairing of men and women was severed as each was forced to contribute their vitality to their enemies, men through ritual torture and sacrifice and women via adoption. This was a pattern that would repeat itself with other Iroquoian confederacies in the century to follow so that, in the end, only those tribes that had chosen to join the League of the Iroquois would survive.

Many new insights into past Iroquoian culture and, specifically, cosmology have come to light in the course of preparing this thesis. Some, like

the observations made with regard to sweatlodges, ossuaries, mounds, and the hillocks within which the Three Sisters germinated, are well corroborated with archaeological, historical, and ethnographical evidence from different sites and different authors of historic and ethnographic testimony. They may also be seen to be corroborated by the fact that, while pertaining to different phenomenon, they nonetheless describe evidence of the same constellation of attributes (the presence of secondary burials, circular mounded construction, central rocks, mythological and historical corollaries concerning rebirth, and turtle associations). This is clearly indicative of a link in conceptions concerning them. A degree of corroboration is also contributed by the fact that similar features in other American cultures have been interpreted in the same manner.

On the other hand, some suggestions mentioned herein are uncorroborated and, therefore, far more speculative. An example of this is the suggestion that the two smoking pipe fragments in the proposed women's house and the pottery vessel fragments in the sweatlodges signified the symbolic presence of the absent gender. It is certainly true that there is evidence of gender blending in discrete artifacts but it cannot be asserted with any degree of confidence that this is the case in these particular two instances. Nevertheless, perhaps the suggestion will serve as a hypothesis in advance of evidence from future research that may clarify the issue.

Both deductive and inductive approaches to an understanding of the past have strengths and weaknesses. Today's knowledge may be proven to be untrue tomorrow but it can *never* be demonstrated to be true. Truth in the realm of

scholarship is a matter of probability. Envisioning a continuous line, any particular interpretation is situated on a sliding scale of low probability to high probability. In archaeology, increasing the probability that an interpretation is appropriate is a matter of acquiring as much corroborative evidence as possible. Fortunately, the availability to Iroquoian scholars of data from different fields of study – archaeology, history, linguistics, and ethnography – permits the inherent limits of data from these disciplines to be offset by the strengths of those from the other fields of study. Together they hold the potential to create a web of understanding that is much stronger than could ever be derived from a single thread associated with a single discipline. As Lars Fogelin has observed, "Yes, some aspects of past religions are difficult or even impossible to study. However, is this so different from zooarchaeology?" (2008:131).

REFERENCES CITED

Abel, Timothy James
2001 *The Clayton Cluster: Cultural Dynamics of a Late Prehistoric Village Sequence in the Upper St. Lawrence Valley*. Unpublished PhD thesis, University at Albany, State University of New York.

Adams, William Y. and Ernest W. Adams
1991 *Archaeological Typology and Practical Reality: A Dialectical Approach to Artifact Classification and Sorting*. Cambridge: Cambridge University Press.

Audi, Robert (ed.)
1995 *The Cambridge Dictionary of Philosophy*. Cambridge: Cambridge University Press.

Aveni, Anthony F.
2001 *Skywatchers*. Austin: University of Texas Press.

Ball, Bruce F. And Peter T. Bobrowsky
1987 "Cost Effectiveness and Time Mangement Evaluation of Intensive Recovery Techniques". *Canadian Journal of Archaeology* 11:75-96.

Barker, Alex W.
2002 "Myths & Monsters: Decoding Ritual Images of a Mysterious Ancient American Religion". *Archaeology* July/August:40-45.

Beauchamp, William M.
1900 "Iroquois Women". *The Journal of American Folk-Lore*. April-June XIII(XLIX): 81-91.

Bell, James A.
1994 "Interpretation and Testability in Theories about Prehistoric Thinking". Pp. 15-21 in Colin Renfrew and Ezra B. W. Zubrow (eds.) *The Ancient Mind: Elements of Cognitive Archaeology*. Cambridge: Cambridge University Press.

Bernardini, W.
2005 "Reconsidering Spatial and Temporal Aspects of Prehistoric Cultural Identity: A Case Study from the American Southwest. *American Antiquity* 70(1):31-54.

Berres, Thomas Edward
2001 *Power and Gender in Oneota Culture: A Study of a Late Prehistoric People*. DeKalb: Northern Illinois University Press.

Biggar, H.P. (ed.)
1929 *The Works of Samuel de Champlain*. Six Volumes. Toronto: The Champlain Society.
1924 *The Voyages of Jacques Cartier*. No. 11. Ottawa: Public Archives of Canada.

Binford, Lewis R.
1967 "Smudge Pits and Hide Smoking: The Use of Analogy in Archaeological Reasoning". *American Antiquity* 32(1):1-12.

Blais, Judith
1993 "The Bilodeau Site Near Missisquoi Bay: Postmolds, Fishbones and Corn Ear Motifs". Pp. 75-85 in in James F. Pendergast and Claude Chapdelaine

(eds.) *Essays in St. Lawrence Iroquoian Archaeology: Selected Papers in Honour of J.V. Wright*. Occasional Papers in Northeastern Archaeology No. 8. Dundas: Copetown Press.

Bogaert, Harmen Meyndertsz van den

1988 *A Journey into Mohawk and Oneida Country, 1634-1635*. Charles T. Gehring and William A. Starna (trans. and eds.). Syracuse: Syracuse University Press.

Boucher, Pierre

1883 *Canada in the Seventeenth Century*. Edward Louis Montizambert (ed. and trans.). Montreal: George E. Desbarats & Co..

Boyle, D.

1897 "Mounds". *Annual Archaeological Report, Ontario*:30-34.

Bradley, James W.

1987 *Evolution of the Onondaga Iroquois: Accommodating Change, 1500-1655*. Lincoln & London: University of Nebraska Press.

Bradley, Richard

2000 "Thinking Things Over". Review of Metaphor and Material Culture by Christopher Tilley. *Cambridge Archaeological Journal* 10 (1):203-205.

Brown, James A.

1997 "The Archaeology of Ancient Religion in the Eastern Woodlands". *Annual Review of Anthropology* 26:465-485.

Brumbach, Hetty Jo

1985 "Ceramic Analysis and the Investigation of Matrilocality at the Smith Mohawk Village Site". *North American Archaeologist* 6(4):341-355.

Buckley, Thomas and Alma Gottlieb

1988 "A Critical Appraisal of Theories of Menstrual Symbolism". Pp. 1-50 in Thomas Buckley and Alma Gottlieb (eds.) *Blood Magic: The Anthropology of Menstruation*. Berkeley: University of California Press.

Bursey, Jeffrey A.

2006 "The Frog Pond Site (AhGx-359): The Identification of a 17th-Century Neutral Iroquoian Medicine Lodge in Southern Ontario". *Canadian Journal of Archaeology* 30(1):1-39.

Carpenter, Edmund

2002 "Tradition and Continuity in Eskimo Art". Pp. 69-77 in William W. Fitzhugh, Stephen Loring, and Daniel Odess (eds.) *Honoring our Elders: A History of Eastern Arctic Archaeology*. Contributions to Circumpolar Anthropology 2. Washington: National Museum of Natural History, Smithsonian Institution.

Carr, E. H.

1961 *What is History?* Second edition. R. W. Davies (ed.). London: Penguin Books.

Carrasco, David

1999 *City of Sacrifice: The Aztec Empire and the Role of Violence in Civilization*. Boston: Beacon Press.

Ceci, Lynn

1989 "Tracing Wampum's Origins: Shell Bead Evidence from Archaeological

Sites in Western and Coastal New York". Pp. 63-80 in Charles F. Hayes III (ed.) *Proceedings of the 1986 Shell Bead Conference: Selected Papers*. Research Records No. 20. Rochester: Rochester Museum and Science Center.

1982 "The Value of Wampum among the New York Iroquois: A Case Study in Artifact Analysis". *The Journal of Anthropological Research* 38(1):97-107.

1978 "Watchers of the Pleiades: Ethnoastronomy among Native Cultivators in Northeastern North America". *Ethnohistory* 25(4):301-317.

Chapdelaine, Claude

2004 "A Review of the Latest Development in St. Lawrence Iroquoian Archaeology". Pp. 63-75 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series No. 164. Gatineau: Canadian Museum of Civilization.

1992 "The Mandeville Site: A Small Iroquoian Village and a Large Smoking-Pipe Collection – An Interpretation". Pp. 31-40 in *Proceedings of the 1989 Smoking Pipe Conference: Selected Papers*. Research Records No. 22. Rochester: Rochester Museum & Science Center.

1990 "The Mandeville Site and the Definition of a New Regional Group Within the Saint Lawrence Iroquoian World". *Man in the Northeast* 39:53-63.

1989 *Le site Mandeville á Tracy: Variabilité culturelle des Iroquoiens du Saint-Laurent*. Montréal: Recherches amérindiennes au québec.

1980 "L'ascendance culturelle des Iroquoiens du Saint-Laurent". *Recherches Amérindiennes au Québec* X(3):145-152.

Clermont, Norman et Claude Chapdelaine

1992 "Au pied du Cap Diamant, l'occupation préhistorique de la Point de Québec". Pp. 1-279 en *L'occupation historique et préhistorique de la Place Royale à Québec*. Dossiers No. 76. Québec: Ministère des Affaires culturelles du Québec.

Clermont, Norman, Claude Chapdelaine et Georges Barré

1983 *Le Site Iroquoien de Lanoraie: Témoignage d'une maison-longue*. Montréal: recherches amérindiennes au québec.

Clermont, Norman and Michel Gagné

2004 "People of the Drumlins". Pp. 77-86 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series No. 164. Gatineau: Canadian Museum of Civilization.

Collingwood, R. G.

1993 *The Idea of History*. Revised edition. Jan van der Dussen (ed.). Oxford: Oxford University Press.

1978 *R. G. Collingwood: An Autobiography*. Oxford: Clarendon Press.

Conkey, Margaret W.

1990 "Experimenting with Style in Archaeology: Some Historical and Theoretical Issues". Pp. 5-17 in Margaret Conkey and Christine Hastorf (eds.) *The Uses of Style in Archaeology*. Great Britain: Cambridge University Press.

Conkey, Margaret W. And Christine A. Hastorf
1990 "Introduction". Pp. 1-4 in Margaret Conkey and Christine Hastorf (eds.) *The Uses of Style in Archaeology*. Great Britain: Cambridge University Press.
Cook, Ramsay (ed.)
1993 *The Voyages of Jacques Cartier*. Toronto: University of Toronto Press.
Curtin, Jeremiah and J.N.B. Hewitt
1918 "Seneca Fiction, Legends, and Myths". *Thirty-Second Annual Report of the Bureau of American Ethnology*, 1910-1911. Washington: Smithsonian Institution.
D'Andrea, A.C., J. Procopio, J.D. Ackerman, and A. Clements
1977 "Faunal Analysis of the Beckstead Site (BfFt-1)". Pp. 202-240 in James F. Pendergast *The Beckstead Site – 1977*. Mercury Series Paper 123. Ottawa: National Museum of Man.
Darvill, Timothy
2002 *The Concise Oxford Dictionary of Archaeology*. Oxford: Oxford University Press.
Davidson, Hilda Ellis
1993 *The Lost Beliefs of Northern Europe*. Routledge: London and New York.
Dawson, Kenneth C. A.
1981 "Prehistoric Stone Features of the Relict North Shore Cobble Beaches of Lake Superior". Pp. 297-312 in Michael Wilson, Kathie L. Road and Kenneth J. Hardy (eds.) *Megaliths to Medicine Wheels: Boulder Structures in Archaeology*. Proceedings of the Eleventh Annual Chacmool Conference. Calgary: University of Calgary.
Deetz, James
1996 *In Small Things Forgotten: An Archaeology of Early American Life*. Revised edition. New York: Anchor Books.
1968 "The Inference of Residence and Descent Rules from Archaeological Data". Pp. 41-48 in Sally R. Binford and Lewis R. Binford (eds.) *New Perspectives in Archaeology*. Chicago: Aldine Publishing Company.
Donaldson, William S. Ad Stanley Wortner
1995 "The Hind Site and the Glacial Kame Burial Complex in Ontario". *Ontario Archaeology* 59:5-95.
Donnan, Christopher B.
1971 "Ancient Peruvian Potters' Marks and their Interpretation through Ethnographic Analogy". *American Antiquity* 36(4):460-466.
Emerson, Thomas E. and Timothy R. Pauketat
2008 "Historical-Processual Archaeology and Culture Making: Unpacking the Southern Cult and Mississippian Religion". Pp. 167-188 in David S. Whitley and Kelley Hays-Gilpin (eds.) *Belief in the Past: Theoretical Approaches to the Archaeology of Religion*. Walnut Creek: Left Coast Press.
Engelbrecht, William
2003 *Iroquoia: The Development of a Native World*. Syracuse: Syracuse University Press.

Engelbrecht, William, Earl Sidler, and Michael Walko
1990 "The Jefferson County Iroquoians". *Man in the Northeast* 39:65-77.
Fenton, William N.
1998 *The Great Law and the Longhouse: A Political History of the Iroquois Confederacy*. Norman: University of Oklahoma Press.
1982 "Masked Medicine Societies of the Iroquois". Pp. 325-365 in Zena Pearlstone Mathews and Aldona Jonaitis (eds.) *Native North American Art History: Selected Readings*. Palo Alto: Peek Publications.
1978 "Northern Iroquoian Culture Patterns". Pp. 296-321 in Bruce G. Trigger (ed.) *Handbook of North American Indians*, Volume 15: Northeast. Washington: Smithsonian Institution.
1968 *Parker on the Iroquois*. Syracuse: Syracuse University Press.
1940 "Masked Medicine Societies of the Iroquois". *Annual Report of the Smithsonian Institution*: 397-430.
Fenton, William N. and Elizabeth L. Moore (eds.)
1974/7 *Customs of the American Indians Compared with the Customs of Primitive Times*. Father Joseph François Lafitau. Two volumes. Toronto: The Champlain Society.
Finlayson, William D.
1998 *Iroquoian Peoples of the Land of Rocks and Water, A.D. 1000-1650: A Study in Settlement Archaeology*. Four volumes. London: London Museum of Archaeology, an affiliate of the University of Western Ontario.
1985 *The 1975 and 1978 Rescue Excavations at the Draper Site: Introduction and Settlement Patterns*. Mercury Series Paper No. 130. Ottawa: National Museum of Man.
1977 *The Saugeen Culture: A Middle Woodland Manifestation in Southwestern Ontario*. Mercury Series Paper No. 61 (2 volumes). Ottawa: National Museum of Man.
Flannery, Kent V. And Joyce Marcus
1996 "Cognitive Archaeology". Pp. 350-363 in Robert W. Preucel and Ian Hodder (eds.) *Contemporary Archaeology in Theory: A Reader*. Oxford: Blackwell Publishing.
Fogelin, Lars
2008 "Delegitimizing Religion: The Archaeology of Religion as...Archaeology". Pp. 129-141 in David S. Whitley and Kelley Hays-Gilpin (eds.) *Belief in the Past: Theoretical Approaches to the Archaeology of Religion*. Walnut Creek: Left Coast Press.
Fontana, David
1993 *The Secret Language of Symbols: A Visual Key to Symbols and Their Meanings*. San Francisco: Chronicle Books.
Ford, James A.
1954 "On the Concept of Types". *American Anthropologist*, New Series 56(1):42-57.
Fox, William A.

2004 "Horned Panthers and Erie Associates". Pp. 283-304 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series Paper No. 164. Gatineau: Canadian Museum of Civilization.

Fox, William A. and J. Eldon Molto

1994 "The Shaman of Long Point". *Ontario Archaeology* 57:23-44.

Frazer, James George

1951 *The Golden Bough: A Study in Magic and Religion*. New York: The MacMillan Company.

Furst, Peter T.

1995 "'This Little Book of Herbs': Psychoactive Plants as Therapeutic Agents in the Badianus Manuscript of 1552". Pp. 108-130 in Richard Evans Schultes and Siri von Reis (eds.) *Ethnobotany: Evolution of a Discipline*. Portland: Dioscorides Press.

Galloway, Patricia

1997 "Where Have All the Menstrual Huts Gone? The Invisibility of Menstrual Seclusion in the Late Prehistoric Southeast". Pp. 47-62 in Cheryl Classen and Rosemary A. Joyce (eds.) *Women in Prehistory: North America and Mesoamerica*. Philadelphia: University of Pennsylvania Press.

1992 "The Unexamined Habitus: Direct Historical Analogy and the Archaeology of the Text". Pp. 178-195 in Jean-Claude Gardin and Christopher S. Peebles (eds.) *Representations in Archaeology*. Bloomington and Indianapolis: Indian University Press.

Gaskell, G.A.

1960 *Dictionary of All Scriptures and Myths: A Classic Reference Guide to the Sacred Language of the Religions of the World*. New York: Julian Press.

Goldenweiser, Alexander A.

1967 "Iroquoian Social Organization". Pp. 565-576 in Roger C. Owen, James J.F. Deetz, and Anthony D. Fisher (eds.) *The North American Indians: A Sourcebook*. London: The MacMillan Company. Abridged version of "On Iroquois Work, 1912" (1913).

Gramly, Richard Michael

2000 *To the Rim of the World: Death and Burial at an Eastern Iroquoian Site*. The Amateur Archaeologist, Volume 6(2).

Greenman, Emerson F.

1967 *The Younge Site: An Archaeological Record from Michigan*. Occasional Contributions from the Museum of Anthropology of the University of Michigan No. 6. Ann Arbor: University of Michigan Museum of Anthropology. Reprinted edition.

Gutteridge, Anne C.

1983 *Methuen Illustrated Dictionary of Biology: The Principles of Biology Explained and Illustrated*. Agincourt: Mithuen.

Hale, Horatio

1888 "Huron Folk-Lore: I. Cosmogonic Myths, the Good and Evil Minds". *The Journal of American Folklore* 1(3):177-183.

Hall, Robert L.

1997 *An Archaeology of the Soul: North American Indian Belief and Ritual*. Urbana and Chicago: University of Illinois Press.
1977 "An Anthropocentric Perspective for Eastern United States Prehistory". *American Antiquity* 42(4):499-518.
1976 "Ghosts, Water Barriers, Corn, and Sacred Enclosures in the Eastern Woodlands". *American Antiquity* 41(3):360-364.

Hallowell, Gerald (ed.)
2004 *The Oxford Companion to Canadian History*. Don Mills: Oxford University Press.

Hamell, George R.
1998 "Long-Tail: The Panther in Huron-Wyandot and Seneca Myth, Ritual, and Material Culture". Pp. 258-291 in Nicholas J. Saunders (ed.) *Icons of Power: Feline Symbolism in the Americas*. London & New York: Routledge.
1992 "The Iroquois and the World's Rim: Speculations on Color, Culture, and Contact". *American Indian Quarterly* Fall:451-469.
1989 "Life's Immortal Shell: Wampum Among the Iroquois". Pp. 205 in Charles F. Hayes III (ed). *Proceedings of the 1986 Shell Bead Conference: Selected Papers*. Research Record No. 20. Rochester: Rochester Museum and Science Center.
1987 "Mythical Realities and European Contact in the Northeast During the Sixteenth and Seventeenth Centuries". *Man in the Northeast* 33:63-87.
1983 "Trading in Metaphors: The Magic of Beads". Pp. 5-28 in Charles F. Hayes III (ed.) *Proceedings of the 1982 Glass Trade Bead Conference*. Research Record No. 16. Rochester: Rochester Museum and Science Center.

Hamell, George R. And William A. Fox
2005 "Rattlesnake Tales". *Ontario Archaeology* 79/80:127-149.

Hastorf, Christine A.
1991 "Gender, Space, and Food in Prehistory". Pp, 132-159 in Joan M. Gero and Margaret W. Conkey (eds.) *Engendering Archaeology: Women and Prehistory*. Oxford: Blackwell Publishing.

Hays-Gilpin, Kelley
2008 "Archaeology and Women's Ritual Business". Pp. 247-258 in David S. Whitley and Kelley Hays-Gilpin (eds.) *Belief in the Past: Theoretical Approaches to the Archaeology of Religion*. Walnut Creek: Left Coast Press.

Heidenreich, Conrad E.
1971 *Huronia: A History and Geography of the Huron Indians 1600-1650*. Toronto: McClelland and Stewart.

Heiser, Charles B., Jr.
1987 *The Fascinating World of the Nightshades: Tobacco, Mandrake, Potato, Tomato, Pepper, Eggplant, etc.*. Revised edition. New York: Dover Publications, Inc..

Herrick, James W.
1995 *Iroquois Medical Botany*. Syracuse: Syracuse University Press.

Hewitt, J.N.B.
1932 "Status of Woman in Iroquois Polity before 1784". *Annual Report of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1932*: 475-488.
1928 "Iroquoian Cosmology, Second Part, With Introduction and Notes". *Forty-third Annual Report of the Bureau of American Ethnology 1925-1926*. Washington: Smithsonian Institution.
1895 "The Iroquoian Concept of the Soul". *The Journal of American Folklore* 8(29):107-116.
1889 "Sacred Numbers among the Iroquois". *The American Anthropologist* II:165-166.

Hill, James N.
1994 "Prehistoric Cognition and the Science of Archaeology". Pp. 83-92 in Colin Renfrew and Ezra B. W. Zubrow (eds.) *The Ancient Mind: Elements of Cognitive Archaeology*. Cambridge: Cambridge University Press.
1970 *Broken K Pueblo: Prehistoric Social Organization in the American Southwest*. Anthropological Papers of the University of Arizona No. 18. Tucson: The University of Arizona Press.

Hodder, Ian
1986 *Reading the Past: Current Approaches to Interpretation in Archaeology*. Second edition. Cambridge: Cambridge University Press.

Hosbach, Richard E.
1992 "A Gyneco-Andriod Subset of Native Iroquoian El Rancho Pipes: A New Pipe Designation with the Philosophical Concept of Sexual Duality as Its Basic Motif". Pp. 83-96 in Charles F. Hayes (ed.) *Proceedings of the 1989 Smoking Pipe Conference: Selected Papers*. Research Record No. 22. Rochester: Rochester Museum and Science Center.

Jamieson, James Bruce
1990 "The Archaeology of the St. Lawrence Iroquoians". Pp. 385-404 in Chris J. Ellis and Neal Ferris (eds.) *The Archaeology of Southern Ontario to A.D. 1650*. London: Occasional Publication of the London Chapter, Ontario Archaeological Society, No. 5.
1983 "An Examination of Prisoner-Sacrifice and Cannibalism at the St. Lawrence Iroquoian Roebuck Site". *Canadian Journal of Archaeology* 7(2):159-175.
1980 "Grenville County Archaeological Survey Project: A Preliminary Report on the Licence Activities of J.B. Jamieson, Summer 1979". Canadian Museum of Civilization archival manuscript no. 88-2973.

Jenness, Diamond
1956 *The Corn Goddess*. Bulletin No. 141, Anthropological Series No. 39. Ottawa: National Museum of Canada.

Johnsen, Harald and Bjornar Olsen
1992 "Hermeneutics and Archaeology: On the Philosophy of Contextual Archaeology". *American Antiquity* 57(3):419-436.

Johnson, Matthew
1999 *Archaeological Theory: An Introduction*. Oxford: Blackwell Publishers

Ltd..
Johnston, Richard B.
1979 "Notes on Ossuary Burial Among the Ontario Iroquois". *Canadian Journal of Archaeology* 3:91-104.
1968 *The Archaeology of the Serpent Mounds Site*. Occasional Paper No. 10. Toronto: Royal Ontario Museum.
Judkins, Russell A.
2004 *Lewis Henry Morgan's League of the Iroquois: The Ethnographic Core*. North Andover: Persimmon Press.
Kapches, Mima
2003 "Invisible Women". *Rotunda* Spring:12-19.
1995 "Chaos Theory and Social Movements: A Theoretical View of the Formation of the Northern Iroquoian Longhouse Cultural Pattern". Pp. 86-96 in André Bekerman and Gary Warrick (eds.) *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society Inc*.. North York: The Ontario Archaeological Society.
Kenyon, W.A.
1986 *Mounds of Sacred Earth: Burial Mounds of Ontario*. Archaeology Monograph 9. Toronto: Royal Ontario Museum.
Keyser, James D. and Michael A. Klassen
2001 *Plains Indian Rock Art*. Vancouver and Toronto: UBC Press.
Knight, D.H.
1987 "Settlement Patters at the Ball Site: A 17th Century Huron Village". *Archaeology of Eastern North America* 15:177-188.
Knowles, Nathaniel
1940 "The Torture of Captives by the Indians of Eastern North America". *Proceedings of the American Philosophical Society* 82(2):151-225.
Koch, Christof
2009 "When Does Consciousness Arise? In the Womb, at Birth or During Early Childhood?" *Scientific American Mind* September/October: 20-21.
Kraft, Herbert C.
1975 *The Archaeology of the Tocks Island Area*. New Jersey : Archaeological Research Center, Seton Hall University Museum.
Kuhn, Robert D.
2004 "Reconstructing Patterns of Interaction and Warfare between the Mohawk and Northern Iroquoians during the A.D. 1400-1700 Period". Pp. 145-166 in James V. Wright and Jean-Luc Pilon(eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series Paper No. 164. Gatineau: Canadian Museum of Civilization.
1985 *Trade and Exchange among the Mohawk-Iroquois: A Trace Element Analysis of Ceramic Smoking Pipes*. Unpublished doctoral dissertation, State University of New York at Albany.
Laidlaw, George E.
1913 Ontario Effigy Pipes in Stone. Second Paper.
Lakoff, George and Mark Johnson

1999 *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.

Leach, Edmund

1970 *Claude Lévi-Strauss*. Chicago: University of Chicago Press.

Lekson, Stephen H.

1999 *The Chaco Meridian: Centers of Political Power in the Ancient Southwest*. Walnut Creek: AltaMira Press.

Lennox, Paul A.

1984 *The Hood Site: A Historic Neutral Town of 1640 A.D.* Mercury Series Paper No. 121. Ottawa: National Museum of Man.

Lennox, P. A., C. F. Dodd and C. R. Murphy

1986 *The Wiacek Site: A Late Middleport Component*. Ontario: Ministry of Transportation and Communications.

Longacre, William A.

1970 *Archaeology As Anthropology: A Case Study*. Anthropological Papers of the University of Arizona No. 17. Tucson: The University of Arizona Press.

Lounsbury, Floyd G.

1978 "Iroquoian Languages". Pp. 334-343 in Bruce G. Trigger (vol. ed.) *Handbook of North American Indians*, Volume 15: Northeast (William C. Sturtevant, gen. ed.). Washington: Smithsonian Institution.

1961 "Iroquois-Cherokee Linguistic Relations". Pp. 11-17 in William N. Fenton and John Gulick (eds.) *Symposium on Cherokee and Iroquois Culture*. Bureau of American Ethnology Bulletin No. 180. Washington: Smithsonian Institution.

Lowther, G. R.

1961 "Relations between Historical Theory and Archaeological Practice in the Work of R. G. Collingwood". *Anthropologica* 3(2):173-180.

MacDonald, Robert I. And Ronald F. Williamson

2001 "Sweat Lodges and Solidarity: The Archaeology of the Hubbert Site". *Ontario Archaeology* 71:29-78.

MacNeish, Richard S.

1952 *Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory*. Bulletin No. 124. Ottawa: National Museum of Canada.

Magne, Martin P. R. and Michael A. Klassen

2002 "A Possible Fluteplayer Pictograph Site Near Exshaw, Alberta". *Canadian Journal of Archaeology* 26(1):1-24.

Mangelsdorf, Paul C.

1974 *Corn: Its Origin, Evolution, and Improvement*. Cambridge: Harvard University Press.

Mann, Barbara Alice

2000 *Iroquoian Women: The Gantowisas*. New York: Peter Lang Publishing, Inc..

Marcus, Joyce and Kent V. Flannery

1994 "Ancient Zapotec Ritual and Religion: An Application of the Direct Historical Approach". Pp. 55-74 in Colin Renfrew and Ezra B. W.

Zubrow (eds.) *The Ancient Mind: Elements of Cognitive Archaeology*. Cambridge: Cambridge University Press.

Mason, Ronald J.

2006 *Inconstant Companions: Archaeology and North American Indian Oral Traditions*. Tuscaloosa: The University of Alabama Press.

1981 *Great Lakes Archaeology*. New York: Academic Press.

Mathews, Zena Pearlstone

1981 "Janus and Other Multiple-Image Iroquoian Pipes". *Ontario Archaeology* 35:3-22.

1980 "Of Man and Beast: The Chronology of Effigy Pipes Among Ontario Iroquoians". *Ethnohistory* 27(4):295-307.

1979 "Pipes with Human Figures from Ontario and Western New York". *American Indian Art Magazine* 4(3):42-47.

1978 *The Relation of Seneca False Face Masks to Seneca and Ontario Archaeology*. New York & London: Garland Publishing, Inc..

1976 "Huron Pipes and Iroquoian Shamanism". *Man in the Northeast* 12:15-31.

McCaffrey, Moira T., J. Bruce Jamieson, Claude Chapdelaine, Ruth Holmes Whitehead, Ludger Müller-Wille, and Taamusi Qumaq

1992 *Wrapped in the Colours of the Earth: Cultural Heritage of the First Nations*. Montreal: McCord Museum of Canadian History.

McGhee, Robert

1977 "Ivory for the Sea Woman: The Symbolic Attributes of a Prehistoric Technology". *Canadian Journal of Archaeology* 1:141-149.

McLeish, Kenneth (ed.)

1995 *Key Ideas in Human Thought*. Rocklin: Prima Publishing.

McMillan, Alan D.

1988 *Native Peoples and Cultures of Canada*. Vancouver and Toronto: Douglas & McIntyre.

Mester, Ann M.

1989 "Marine Shell Symbolism in Andean Culture". Pp. 157-167 in Charles F. Hayes III (ed.) *Proceedings of the 1986 Shell Bead Conference: Selected Papers*. Research Records No. 20. Rochester: Rochester Museum and Science Center.

Moodie, D. Wayne, A. J. W. Catchpole, and Kerry Abel

1992 "Northern Athapaskan Oral Traditions and the White River Volcano". *Ethnohistory* 39(2):148-171.

Noble, William C.

1979 "Ontario Iroquois Effigy Pipes". *Canadian Journal of Archaeology* 3 :69-90.

Ostéothèque de Montréal

1989 Faunal Analysis of the McKeown Site, BeFv-1. Rapport no. 52. Unpublished report on file U.Q.A.M., Laboratoire d'Archéologie.

Parker, Arthur C.

1989 *Seneca Myths and Folk Tales*. Lincoln and London: University of Nebraska Press. Reprinted from the 1923 edition.

1968 *Parker on the Iroquois*. William N. Fenton (ed.). Syracuse: Syracuse

University Press.
1920 *The Archaeological History of New York, Part I.* New York State Museum Bulletin Nos. 235, 236. Albany: The University of the State of New York.
1916 "The Origin of the Iroquois as Suggested by Their Archeology". *American Anthropologist*, New Series 18(4):479-507.
1912 "Certain Iroquois Tree Myths and Symbols". *American Anthropologist*, New Series 14(4):608-620.
1910 *Iroquois Uses of Maize and Other Food Plants*. Bulletin No. 144. Albany: New York State Museum.
1909 "Secret Medicine Societies of the Seneca". *American Anthropologist* 11(2):161-185.

Payne, Michael (ed.)
1996 *A Dictionary of Cultural and Critical Theory*. Oxford: Blackwell Publishers.

Pearce, Robert J.
2005 "Turtles from Turtle Island: An Archaeological Perspective from Iroquoia". *Ontario Archaeology* 79/80:88-108.

Pearsall, Deborah M.
2000 *Paleoethnobotany: A Handbook of Procedures*. Second edition. San Diego: Academic Press.

Pendergast, James F.
1997- "The Confusing Identities Attributed to Stadacona and Hochelaga". *Journal of Canadian*
1998 *Studies* 32(4):149-168.
1996 "Problem Orientation for St. Lawrence Iroquoian Archaeological Research". *Journal of Middle Atlantic Archaeology* 12:53-60.
1993 "More on When and Why the St. Lawrence Iroquoians Disappeared". Pp. 9-47 in James F. Pendergast and Claude Chapdelaine (eds.) *Essays in St. Lawrence Iroquoian Archaeology: Selected Papers in Honour of J.V. Wright*. Occasional Papers in Northeastern Archaeology No. 8. Dundas: Copetown Press.
1992 "Some Notes on Ceramic Smoking Pipes from St. Lawrence Iroquoian Archaeological Sites". Pp. 51-70 in *Proceedings of the 1989 Smoking Pipe Conference: Selected Papers*. Research Records No. 22. Rochester: Rochester Museum & Science Center.
1991 "The St. Lawrence Iroquoians: Their Past, Present, and Immediate Future". *The Bulletin* (102):47-71.
1990a "Emerging Saint Lawrence Iroquoian Settlement Patterns". *Man in the Northeast* 40:17-30.
1990b "Excavation at the Maynard-McKeown Site, A St. Lawrence Iroquoian Village. *Annual Archaeological Report for Ontario, New Series* (1):46-47.
1989 "The Significance of Some Marine Shell Excavated on Iroquoian Archaeological Sites in Ontario". Pp. 97-103 in Charles F. Hayes III (ed.) *Proceedings of the 1986 Shell Bead Conference: Selected Papers*.

Research Records No. 20. Rochester: Rochester Museum and Science Center.

1988 "The Maynard-McKeown Site, BeFv-1: A 16th Century St. Lawrence Iroquoian Village Site in Grenville County, Ontario, A Preliminary Report". *The Ottawa Archaeologist* 15(4):1-12. Republished in *Arch Notes* September/October 1988.

1985 "Huron – St. Lawrence Iroquois Relations in the Terminal Prehistoric Period". *Ontario Archaeology* 44:23-39.

1984 *The Beckstead Site – 1977*. Mercury Series Paper No. 123. Ottawa: National Museum of Man.

1981 "Distribution of Iroquoian Discoidal Clay Beads". *Ontario Archaeology* 36:57-72.

1981b *The Glenbrook Village Site: A Late St. Lawrence Iroquoian Component in Glengarry County, Ontario*. Mercury Series Paper No. 100. Ottawa: National Museum of Man.

1975 "An *In Situ* Hypothesis to Explain the Origin of the St. Lawrence Iroquoians". *Ontario Archaeology* 25:47-55.

1969 "The MacDougald Site". *Ontario Archaeology* 13:29-53.

1966 *Three Prehistoric Iroquois Components in Eastern Ontario*. Bulletin No. 208. Ottawa: National Museum of Canada.

1962 "The Crystal Rock Site: An Early Onondaga-Oneida Site in Eastern Ontario". *Pennsylvania Archaeologist*, Bulletin of the Society for Pennsylvania Archaeology XXXIII(1):21-34.

Pendergast, James F. and Bruce G. Trigger

1972 *Cartier's Hochelaga and the Dawson Site*. Montreal and London: McGill-Queen's University Press.

Perkins, Morgan

2004 "Continuity and Creativity in Iroquois Beadwork". *American Anthropologist* 106(3):595-599.

Perrelli, Douglas J.

2009 "Iroquoian Social Organization in Practice: A Small-Scale Study of Gender Roles and Site Formation in Western New York". Pp. 19-50 in Laurie E. Miroff and Timothy D. Knapp (eds.) *Iroquoian Archaeology & Analytic Scale*. Knoxville:University of Tennessee Press.

Petersen, James B.

1990 "Evidence of the Saint Lawrence Iroquoians in Northern New England: Population Movement, Trade, or Stylistic Borrowing?" *Man in the Northeast* 40:31-39.

Petersen, James B., John G. Crock, Ellen R. Cowie, Richard A. Boisvert, Joshua R. Toney and Geoffrey Mandel

2004 "St. Lawrence Iroquoians in Northern New England: Pendergast was 'Right' and More". Pp. 87-123 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series Paper No. 164. Gatineau: Canadian Museum of Civilization.

Plato

1935 *The Republic of Plato*. A. D. Lindsay (ed.). Everyman's Library No. 64. London: J. M. Dent & Sons Ltd..

Plog, Stephen

1993 "Social Interaction and Stylistic Similarity: A Reanalysis". Pp. 333-371 in Michael B. Schiffer (ed.) *Advances in Archaeological Method and Theory: Selections for Students from Volumes 1 through 4*. New York: Academic Press.

Plotkin, Mark J.

1993 *Tales of a Shaman's Apprentice*. New York: Penguin Books.

Pollock, Susan

1991 "Women in a Men's World: Images of Sumerian Women". Pp. 366-387 in Joan M. Gero and Margaret W. Conkey (eds.) *Engendering Archaeology: Women and Prehistory*. Oxford: Blackwell Publishing.

Popper, Karl R.

1959 *The Logic of Scientific Discovery*. London & New York: Routledge.

Pratt, Marjorie K.

1991 "The St. Lawrence Iroquois of Northern New York". *The Bulletin* 102:43-46.

1980 "The St. Lawrence Iroquois Conference: Some Lessons to be Learned". Pp. 31-32 in Charles F. Hayes III (ed.) *Proceedings of the 1979 Iroquois Pottery Conference*. Rochester: Rochester Museum and Science Center.

Prezzano, Susan C.

1997 "Warfare, Women, and Households: The Development of Iroquois Culture". Pp. 88-99 in Cheryl Classen and Rosemary A. Joyce (eds.) *Women in Prehistory: North America and Mesoamerica*. Philadelphia: University of Pennsylvania Press.

Ramsden, Carol Nasmith

1989 *The Kirche Site: A 16th Century Huron Village in the Upper Trent Valley*. Occasional Papers in Northeastern Archaeology 1. Dundas: Copetown Press.

Ramsden, Peter George

1977 *A Refinement of Some Aspects of Huron Ceramic Analysis*. Mercury Series Paper No. 63. Ottawa: National Museum of Man.

Reid, C.S.

1975 *The Boys Site and the Early Ontario Iroquois Tradition*. Mercury Series Paper No. 42. Ottawa: National Museum of Man.

Reynolds, Ffion

2009 "Regenerating Substances: Quartz as an Animistic Agent". *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 2(2):153-166.

Rice, Prudence M.

1987 *Pottery Analysis: A Sourcebook*. Chicago: The University of Chicago Press.

Richter, Daniel K.

1992 *The Ordeal of the Longhouse: The Peoples of the Iroquois League in the Era of European Colonization*. U.S.A.: The University of North Carolina

Press.
Ritchie, William A.
1950 "Another Probable Case of Prehistoric Bear Ceremonialism in New York". *American Antiquity* 15(3):247-249.
1944 *The Pre-Iroquoian Occupations of New York State*. Rochester: Rochester Museum of Arts and Sciences.
Ritchie, William A. And Robert E. Funk
1973 *Aboriginal Settlement Patterns in the Northeast*. Memoir 20. Albany: New York State Museum and Science Service.
Ritchie, William A. and Richard S. MacNeish
1949 "The Pre-Iroquoian Pottery of New York State". *American Antiquity* 15(2):97-124.
Robb, John E.
1998 "The Archaeology of Symbols". *Annual Review of Anthropology* 27:329-346.
Robertson, David A. and Ronald F. Williamson
2003 "The Archaeology of the Dunsmore Site: 15th-Century Community Transformations in Southern Ontario". *Canadian Journal of Archaeology* 27(1):1-73.
Robertson, David A., Stephen G. Monckton, and Ronald F. Williamson
1995 "The Wiacek Site Revisited: The Results of the 1990 Excavations". *Ontario Archaeology* 60:40-91.
Robinson, Andrew
2002 *Lost Languages: The Enigma of the World's Undeciphered Scripts*. New York: McGraw-Hill.
Root-Bernstein, Robert
2003 "Metaphorical Thinking". *American Scientist* November-December:573-574.
Rouse, Irving
1960 "The Classification of Artifacts in Archaeology". American Antiquity 25(3):313-323.
Sackett, James R.
1990 "Style and Ethnicity in Archaeology: The Case for Isochrestism". Pp. 32-43 in Margaret Conkey and Christine Hastorf (eds.) *The Uses of Style in Archaeology*. Great Britain: Cambridge University Press.
1985 "Style and Ethnicity in the Kalahari: A Reply to Wiessner". *American Antiquity* 50(1):154-159.
1977 "The Meaning of Style in Archaeology: A General Model". *American Antiquity* 42(3):369-380.
Sahagún, Fray Bernardino de
1950-82 *Florentine Codex: General History of the Things of New Spain*. Translated by Arthur J. O. Anderson and Charles E. Dibble. Santa Fe & Salt Lake City: School of American Research and the University of Utah.
Salmon, Wesley C.
1966 *The Foundations of Scientific Inference*. Pittsburgh: University of Pittsburgh Press.

Saunders, Nicholas J.
2002 "The Colours of Light: Materiality and Chromatic Cultures of the Americas". Pp. 209-226 in Andrew Jones and Gavin MacGregor (eds.) *Colouring the Past: The Significance of Colour in Archaeological Research*. Oxford and New York: Berg.
1999 "Biographies of Brilliance: Pearls, Transformations of Matter and Being, c. AD 1492". *World Archaeology* 31(2):243-257.
Schaafsma, Polly
2000 *Warrior, Shield, and Star: Imagery and Ideology of Pueblo Warfare*. Santa Fe: Western Edge Press.
Schimmel, Anne Marie
1993 *The Mystery of Numbers*. Oxford: Oxford University Press.
Sempowski, Martha L.
2004 "Spiritual Transformation as Reflected in Late Prehistoric Human Effigy Pipes from Western New York". Pp. 263-281 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series Paper No. 164. Gatineau: Canadian Museum of Civilization.
1986 "Differential Mortuary Treatment of Seneca Women: Some Social Inferences". *Archaeology of Eastern North America* 14:35-44.
Sempowski, Martha L. and Lorraine P. Saunders
2001 *Dutch Hollow and Factory Hollow: The Advent of Dutch Trade Among the Seneca*. Three volumes. Charles F. Wray Series in Seneca Archaeology Volume III. Rochester Museum and Science Center Research Records No. 24. Rochester: Rochester Museum and Science Center.
Shafer, Ann Eastlack
1941 The Status of Iroquois Women. Unpublished Master's thesis, University of Pennsylvania.
Shaffer, Brian S.
1992 "Quarter-Inch Screening: Understanding Biases in Recovery of Vertebrate Faunal Remains". *American Antiquity* 57(1):129-136.
Shimony, Annemarie Anrod
1994 *Conservatism Among the Iroquois at the Six Nations Reserve*. Rev. ed.. Syracuse: Syracuse University Press.
1961 *Conservatism Among the Iroquois at the Six Nations Reserve*. Yale University Publications in Anthropology Number 65. New Haven: Department of Anthropology, Yale University.
Slotkin, J.S. and Karl Schmitt
1949 "Studies of Wampum". *American Anthropologist*, New Series 51(2):223-236.
Smith, David G.
1997 "Recent Investigation of Late Woodland Occupations at Cootes Paradise, Ontario". *Ontario Archaeology* 63:4-16.
1990 "Iroquoian Societies in Southern Ontario: Introduction and Historical Overview". Pp. 279-290 in Chris J. Ellis and Neal Ferris (eds.) *The*

Archaeology of Southern Ontario to A.D. 1650. London: Occasional Publication of the London Chapter, Ontario Archaeological Society, No. 5.

Smith, De Cost

1888 "Witchcraft and Demonism of the Modern Iroquois". *The Journal of American Folklore* 1(3):184-194.

Snow, Dean R.

1998 "Iroquoian Culture". Pp. 393-395 in Guy Gibbon (ed.) *Archaeology of Prehistoric Native America: An Encyclopedia*. New York & London: Garland Publishing, Inc..

Sofaer, Anna

1994 "Pueblo Bonito Petroyglyph on Fajada Butte: Solar Aspects". In E. C. Krupp (ed.) *Celestial Seasonings: Connotations of Rock Art*. Papers of the 1994 International Rock Art Congress.

Speck, Frank G.

1949 *Midwinter Rites of Cayuga Long House*. Lincoln & London: University of Nebraska Press.

Stahl, Ann B.

1993 "Concepts of Time and Approaches to Analogical Reasoning in Historical Perspective". *American Antiquity* 58(2):235-260.

Steckley, John

1985 "An Ethnolinguistic Analysis of Tobacco among the Huron". *Arch Notes* 85(2):13-17.

Steward, Julian H.

1942 "The Direct Historical Approach to Archaeology". *American Antiquity* 7(4):337-343.

Stewart, Frances L.

1999 *Proto-Huron/Petun and Proto-St. Lawrence Iroquoian Subsistence as Culturally Defining*. Bulletin 17. London: London Museum of Archaeology, an affiliate of the University of Western Ontario.

1991 *The Faunal Remains from the Keffer Site (AkGv-14), A Southern Ontario Iroquois Village*. Report 21. London: Museum of Indian Archaeology, an Affiliate of the University of Western Ontario.

1974 *Faunal Remains from the Nodwell Site (BcHi-3) and From Four Other Sites in Bruce County, Ontario*. Mercury Series Paper 16. Ottawa: National Museum of Man.

Stoltman, James B.

1973 *The Laurel Culture in Minnesota*. Minnesota Prehistoric Archaeology Series No. 8. St. Paul: Minnesota Historical Society.

Struever, Stuart

1968 "Flotation Techniques for the Recovery of Small-Scale Archaeological Remains". *American Antiquity* 33(3):353-362.

Talalay, Lauren E.

1987 "Rethinking the Function of Clay Figurine Legs from Neolithic Greece: An Argument by Analogy". *American Journal of Archaeology* 91(2):161-169.

Tehanetorens
1972 *Wampum Belts*. Onchiota: Six Nations Indian Museum.
Thomas, David H.
1969 "Great Basin Hunting Patterns: A Quantitative Method for Treating Faunal Remains". *American Antiquity* 34(4):392-401.
Thomas, Stephen Cox
1998 "Zooarchaeology of the Parsons Site". *Ontario Archaeology* 65/66:121-139.
Thwaites, Reuben Gold (ed.)
1959 *The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France 1610-1791*. Seventy-two volumes. New York: Pageant Book Company.
Tilley, Christopher
1999 *Metaphor and Material Culture*. Oxford: Blackwell Publishers.
Tooker, Elisabeth
1991 *An Ethnography of the Huron Indians, 1615-1649*. Syracuse: Syracuse University Press.
1984 "Women in Iroquois Society". Pp. 109-123 in Michael K. Foster, Jack Campisi, and Marianne Mithun (eds.) *Extending the Rafters: Interdisciplinary Approaches to Iroquoian Studies*. Albany: State University of New York Press.
1978 "Iroquois Since 1820". Pp. 449-465 in Bruce G. Trigger (ed.) *Handbook of North American Indians*, Volume 15: Northeast. Washington: Smithsonian Institution.
1970 *The Iroquois Ceremonial of Midwinter*. Syracuse: Syracuse University Press.
Torbenson, Michael, Arthur Aufderheide, and Elden Johnson
1992 "Punctured Human Bones of the Laurel Culture from Smith Mound Four, Minnesota". *American Antiquity* 57(3):506-514.
Tremblay, Roland
2006 *The St. Lawrence Iroquoians: Corn People*. Montréal: Pointe-À-Callière.
Trigger, Bruce G.
2006 *A History of Archaeological Thought*. Second edition. Cambridge: Cambridge University Press.
2003 *Understanding Early Civilizations*. Cambridge: Cambridge University Press.
1995 "Expanding Middle-Range Theory". *Antiquity* 69(264):449-458.
1989 *A History of Archaeological Thought*. Cambridge: Cambridge University Press.
1985 *Natives and Newcomers: Canada's 'Heroic Age' Reconsidered*. Kingston and Montreal: McGill-Queen's University Press.
1981 "Prehistoric Social and Political Organization: An Iroquoian Case Study". *Foundations of Northeast Archaeology*. Dean R. Snow (ed.). New York: Academic Press, Inc..
1978 "Early Iroquoian Contacts With Europeans". Pp. 344-356 in Bruce G. Trigger's (vol. ed.) *Handbook of North American Indians*, Volume 15:

Northeast (William C. Sturtevant, gen. ed.). Washington: Smithsonian Institution.
1976 *The Children of Aataentsic: A History of the Huron People to 1660*. Montreal and London: McGill-Queen's University Press.
1969 *The Huron: Farmers of the North*. U.S.A.: Holt, Rinehart and Winston.
1968 "The Determinants of Settlement Patterns". Pp. 53-78 in K.C. Chang (ed.) *Settlement Archaeology*. Palo Alto: National Press Books.

Trigger, Bruce G. and James F. Pendergast
1978 "Saint Lawrence Iroquoians". Pp. 357-367 in Bruce G. Trigger's (vol. ed.) *Handbook of North American Indians*, Volume 15: Northeast (William C. Sturtevant, gen. ed.). Washington: Smithsonian Institution.

Trigger, Bruce G., L. Yaffe, M. Diksic, J.-L. Galinier, H. Marshall and J.F. Pendergast
1980 "Trace Element Analysis of Iroquoian Pottery". *Canadian Journal of Archaeology* 4:119-145.

Tuck, James A.
1978 "Northern Iroquoian Prehistory". Pp. 322-333 in Bruce G. Trigger's (vol. ed.) *Handbook of North American Indians*, Volume 15: Northeast (William C. Sturtevant, gen. ed.). Washington: Smithsonian Institution.
1971 *Onondaga Iroquois Prehistory: A Study in Settlement Archaeology*. Syracuse: Syracuse University Press.

Tyyska, Allen Edwin
1972 "Huron Sweat Baths". Paper presented at the 5th annual meeting of the Canadian Archaeological Association, St. John's, Newfoundland.

Vecsey, Christopher
1986 "The Story and Structure of Iroquois Confederacy". *Journal of the American Academy of Religion* 54(1):79-106.

von Gernet, Alexander
1993 "The Construction of Prehistoric Ideation: Exploring the Universality-Idiosyncrasy Continuum". *Cambridge Archaeological Journal* 3(1):67-81.
1992 "Hallucinogens and the Origins of the Iroquoian Pipe/Tobacco/Smoking Complex". Pp. 171-185 in Charles F. Hayes III (ed.) *Proceedings of the 1989 Smoking Pipe Conference: Selected Papers*. Research Records No. 22. Rochester: Rochester Museum & Science Center.

von Gernet, Alexander and Peter Timmins
1987 "Pipes and Parakeets: Constructing Meaning in an Early Iroquoian Context". Pp. 31-42 in Ian Hodder (ed.) *Archaeology as Long-Term History*. Cambridge: Cambridge University Press.

Wagner, Gail E.
1988 "Comparability Among Recovery Techniques". Pp. 17-35 in Christine A. Hastorf and Virginia S. Popper (eds.) *Current Paleoethnobotany: Analytical Methods and Cultural Interpretations of Archaeological Plant Remains*. Chicago and London: The University of Chicago Press.

Warrick, Gary A.
2007 "The Precontact Iroquoian Occupation of Southern Ontario". Pp. 124-163

in Jordan E. Kerber (ed.) *Archaeology of the Iroquois: Selected Readings and Research Sources*. Syracuse: Syracuse University Press.

1984 *Reconstructing Ontario Iroquoian Village Organization*. Mercury Series Paper No. 124. Ottawa: National Museum of Man.

Waselkov, Gregory A.

1984 "Small Faunal Remains from the McIntyre Site". Pp. 135-159 in Richard B. Johnston (ed.) *The McIntyre Site: Archaeology, Subsistence and Environment*. Mercury Series Paper No. 126. Ottawa: National Museum of Man.

Watson, Patty Jo

1976 "In Pursuit of Prehistoric Subsistence: A Comparative Account of Some Contemporary Flotation Techniques". *Mid-Continental Journal of Archaeology* 1(1):76-100.

Waugh, F.W.

1916 *Iroquois Foods and Food Preparation*. Memoir 86, No. 12 Anthropological Series. Ottawa: National Museum of Man. Facsimile edition, 1973.

Whallon, Robert Jr.

1968 "Investigations of Late Prehistoric Social Organization in New York State". Pp. 223-244 in Sally R. Binford and Lewis R. Binford (eds.) *New Perspectives in Archaeology*. Chicago: Aldine Publishing Company.

White, Tim D.

2003 "Once We Were Cannibals". *Scientific American*:86-93. Updated from the August 2001 issue.

Wiessner, Polly

1983 "Style and Social Information in Kalahari San Projectile Points". *American Antiquity* 48(2):253-276.

Williamson, Ron

2007 "'Otinontsiskiaj ondaon' ('The House of Cut-Off Heads'): The History and Archaeology of Northern Iroquoian Trophy Taking". Pp. 190-221 in Richard J. Chacon and David H. Dye (eds.) *The Taking and Displaying of Human Body Parts as Trophies by Amerindians*. New York: Springer.

Williamson, Ronald F. (ed.)

1998 *The Myers Road Site: Archaeology of the Early to Middle Iroquoian Transition*. Occasional Publication of the Ontario Archaeological Society No. 7. London: Ontario Archaeological Society.

Williamson, Ronald F. and Susan Pfeiffer (eds.)

2003 *Bones of the Ancestors: The Archaeology and Osteobiography of the Moatfield Ossuary*. Mercury Series Archaeology Paper 163. Gatineau: Canadian Museum of Civilization.

Williamson, Ronald F. and Annie Veilleux

2005 "A Review of Northern Iroquoian Decorated Bone and Antler Artifacts: A Search for Meaning". *Ontario Archaeology* 79/80:3-37.

Wintemberg, William J.

1939 *Lawson Prehistoric Village Site, Middlesex County, Ontario*. Bulletin No. 94. Ottawa: National Museum of Canada.

1948 *The Middleport Prehistoric Village Site*. Bulletin No. 109. Ottawa: National Museum of Canada.
1936 *Roebuck Prehistoric Village Site, Grenville County, Ontario*. Bulletin No. 83. Ottawa: National Museum of Canada.
1928 *Uren Prehistoric Village Site, Oxford County, Ontario*. Bulletin No. 51. Ottawa: National Museum of Canada.
1928b "Artifacts from Ancient Graves and Mounds in Ontario". *Transactions of the Royal Society of Canada*, Third Series XXII (II):175-202.
1918 "Folk-Lore Collected at Roebuck, Grenville County, Ontario". *The Journal of American Folklore* 13(120):154-157.
1912 "On Archaeological Work in Ontario and Quebec". Summary Report of the Geological Survey, Canada. Canadian Museum of Civilization archival manuscript no. 80-1797, volume 4.
1907 "Use of Shells by the Ontario Indians". *Annual Archaeological Report*: 38-90. Toronto: Legislative Assembly of Toronto.

Wonderley, Anthony
2006 "Archaeological Research at the Oneida Vaillancourt Site". *The Bulletin*, Journal of the New York State Archaeological Association No. 122:1-26.
2005 "Effigy Pipes, Dipolomacy, and Myth: Exploring Interaction between St. Lawrence Iroquoians and Eastern Iroquois in New York State". *American Antiquity* 70(2):211-240.
2004 *Oneida Iroquois: Folklore, Myth, and History*. Syracuse: Syracuse University Press.
2002 "Oneida Ceramic Effigies: A Question of Meaning". *Northeast Anthropology* 63:23-48.

Wray, Charles F.
1973 *Manual for Seneca Archeology*. New York: Cultures Primitive, Inc..

Wray, Charles F., Martha L. Sempowski, Lorraine P. Saunders, and Gian Carlo Cervone
1991 *Tram and Cameron: Two Early Contact Era Seneca Sites*. Charles F. Wray Series in Seneca Archaeology Volume II. Research Records No. 21. Rochester: Rochester Museum and Science Center.
1987 *The Adams and Culbertson Sites*. Charles F. Wray Series in Seneca Archaeology Volume 1. Research Records No. 19. Rochester: Rochester Museum and Science Center.

Wright, James V.
2004a "The Gordon Island North Site and Cultural Settlement Distributions Along the Upper St. Lawrence River Valley". Pp. 321-393 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series Paper No. 164. Gatineau: Canadian Museum of Civilization.
2004b *A History of the Native People of Canada*. Volume III, Part I (A.D. 500 – European Contact). Mercury Series Paper No. 152. Gatineau: Canadian Museum of Civilization.
1987 "The Roebuck Site: A St. Lawrence Iroquois Prehistoric Village". Pp. 55-58 in R. J. Fulton (ed.) *XIIth INQUA Congress: Quaternary of the Ottawa*

Region and Guides for Day Excursions. Ottawa: National Research Council of Canada.
1979 *Quebec Prehistory*. Ottawa: National Museum of Man.
1974 *The Nodwell Site*. Mercury Series Paper No. 22. Ottawa: National Museum of Man.
1972 *Ontario Prehistory: An Eleven-Thousand-Year Archaeological Outline*. Ottawa: National Museum of Man.
1969 *The Bennett Site*. Bulletin 229. Ottawa: National Museum of Canada.
1966 *The Ontario Iroquois Tradition*. Bulletin No. 210. Ottawa: National Museum of Canada.

Wright, James V. and J.E. Anderson
1969 *The Bennett Site*. Bulletin No. 229. Ottawa: National Museum of Man.

Wright, James V. and D.M. Wright
1993 "Iroquoian Archaeology: It's the Pits". Pp. 1-7 in James F. Pendergast and Claude Chapdelaine (eds.) *Essays in St. Lawrence Iroquoian Archaeology: Selected Papers in Honour of J.V. Wright*. Occasional Papers in Northeastern Archaeology No. 8. Dundas: Copetown Press.
1990 "A News Item from the McKeown Site". *Arch Notes* 90(5):4, 32.

Wright, Joyce M.
2006 "Ceramic Vessels of the Wendat Confederacy: Indicators of Tribal Affiliation or Mobile Clans?" *Canadian Journal of Archaeology* 30(1):40-72.
2005 "True Peoples and Their Monsters: Speculations on the Other in the Age of Exploration". *Terrae Incognitae* 37:1-15.
2004 "Ouatit's People: The Cosmological Significance of Dogs in Wendat Society". Pp. 305-319 in James V. Wright and Jean-Luc Pilon (eds.) *A Passion for the Past: Papers in Honour of James F. Pendergast*. Mercury Series Paper No. 164. Gatineau: Canadian Museum of Civilization.
2002 "Blueberry Warriors & Men with Horns: Fantasy & Folly in the New World". *The Beaver* February/March: 20-24.
1999 *Numbers: A Message from the Past*. Bulletin 16. London: London Museum of Archaeology, an affiliate of the University of Western Ontario.

Wright, Milton J.
1986 *The Uren Site AfHd-3: An Analysis and Reappraisal of the Uren Substage Type Site*. Monographs in Ontario Archaeology 2. The Ontario Archaeological Society.

Wrong, George M. (ed.)
1939 *The Long Journey to the Country of the Hurons*. Father Gabriel Sagard. Trans.: H.H. Langton. Toronto: The Champlain Society.

Wylie, Alison
2002 *Thinking from Things: Essays in the Philosophy of Archaeology*. Berkeley, Los Angeles, and London: University of California Press.
1985 "Ethno-history and 'Reverse Chronology' at Ti'innik, a Palestinian Village". *Antiquity* 69(266):999-1008.

Yarnell, Richard A.

1984 “The McIntyre Site: Late Archaic Plant Remains from Southern Ontario”. Pp. 87-111 in Richard B. Johnston (ed.) *The McIntyre Site: Archaeology, Subsistence and Environment*. Mercury Series Paper No. 126. Ottawa: National Museum of Man.