

PEER POLITIES BEYOND THE PERIPHERY: EARLY AND MIDDLE IROQUOIAN REGIONAL INTERACTION

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Much attention has recently been paid to the nature and extent of interaction between Iroquoian groups of the Great Lakes region and populations situated in the Mississippi River valley. Many of the suppositions generated by this research have been influenced by models of "core and periphery". This paper seeks to address the difficulties encountered in applying these models to the late prehistoric Great Lakes region. Of major concern is the comparative scarcity of clearly identified trade material on sites in southern Ontario. In the absence of clearly identified, consistent interregional contact, the basic applicability of the construct must be questioned. An alternative model is proposed emphasizing the likelihood that prolonged and consistent exchange and communication between peer polities, groups at a similar level of complexity, within the Great Lakes region is of greater significance than sporadic contacts with more highly structured, but distant, societies to the south. It is suggested that the changes that Iroquoian society experienced in southern Ontario are more likely to be understood in terms of regular interaction between groups beyond the "peripheral" region, rather than as influences emanating from a Mississippian "core". It is also suggested that in order to understand the relationships between these politically autonomous groups, we must abandon the current theoretical paradigm, together with its preconceived notions concerning the socio-political affiliation of those polities.

INTRODUCTION

A number of studies have recently focused upon the question of interaction between Iroquoian groups in the Great Lakes region and groups further to the south, particularly those in the Mississippi and Ohio drainages

(Dincauze and Hasenstab 1989; Hasenstab 1990; Jamieson 1991, 1992). The constructs generated by this research have all been influenced, to greater or lesser degrees, by models of centre and periphery. Such models have their immediate origins in Immanuel Wallerstein's (1974) world-systems theory and the work of numerous other researchers (e.g., Frank 1967; Gottman 1980) who are concerned with accounting for the nature and effects of the relationships existing between developed, capitalist nations, and the underdeveloped societies of the Third World.

This paper seeks to address the difficulties encountered in applying the core-periphery interaction (CPI) or similar kinds of long distance interaction models to the late prehistoric Great Lakes region. Of major concern is the scarcity, in the archaeological record of the early Late Woodland period (circa A.D. 900-1300), of clearly identified trade goods originating from the proposed Mississippian core, on sites in southern Ontario. This has required proponents of these models to focus generally upon certain more "prosaic" types of artifacts; yet, as archaeologists we are continually reminded of our inadequate comprehension of the function and role of material culture in past societies. The interpretation of certain attributes as expressions of group identity or solidarity, in the absence of a clear understanding of their evolution and structural context, cannot help but leave one uneasy. Equally discomfiting is the manner in which the exchange of material goods, technologies or ideologies between social groups has been conceptualized, whether implicitly or explicitly, in these recent works.

BROADENING PERSPECTIVES

It is perhaps self-evident that few, if any,

societies in our modern world develop in complete isolation from their neighbours. The relative ease of communication, through a variety of media, between even the most distant parts of the planet has resulted in an unparalleled level of interaction between different cultures, which must adjust on an almost continuous basis in order to reconcile their own ideologies and modes of behaviour with a flood of new influences. Archaeologists are not immune to these developments, incorporating into the basic philosophical *corpora* that guide their research a diverse and eclectic range of theoretical and interpretive approaches, gleaned from an equally wide variety of disciplines. As a result of these developments, few archaeological propositions are now accepted as universal truths. Differing cultural backgrounds and political orientations among researchers, in addition to generational differences, have led to a plethora of schools of thought within the field. This is most apparent in the debate between processualists and post-processualists, and in the efforts to reconcile their different worldviews (e.g., Wylie 1989).

With the vastly increased complexity of the discipline, it should occasion no surprise that its subject matter has also become more complicated. Archaeologists are gradually becoming less willing to view past societies as isolated phenomena, which passed through predictable and set, evolutionary stages of complexity while remaining largely untouched by outside influences. It is now generally recognized that apparently impermeable cultural boundaries were, in fact, easily traversed by any number of means at a variety of levels, which alone or in combination may have had profound impacts upon the participating societies. Thus it may be said that societies, which were formerly understood primarily through their internal relationships and interactions, cannot be understood without equal reference to their external relationships (Wolf 1982).

This general broadening of perspectives within archaeology ultimately provided the basis for several recent attempts to incorporate the Iroquoians of southern Ontario into broader communication and exchange systems, thereby integrating various groups in the greater Northeast with those of the Southeast and Midwest. Dincauze and Hasenstab (1989) largely seek to do so in order to explain the appearance and development, among the Iroquoians, of a package of culture traits that

distinguish them from the majority of their Algonquian neighbours. In their model, these interaction networks ultimately converge on Cahokia, its secondary centres, or its possible rivals such as the Kincaid, Angel, or Marietta sites (Dincauze and Hasenstab 1989:79). Thus, the Iroquoians' reliance on maize horticulture, their occupation of semi-sedentary villages, their increasing concern with defence, their social organization and ideological structure, and even many of the most basic aspects of their material culture are seen to be the direct or indirect result of contact with these groups. While Dincauze and Hasenstab (1989) employ a CPI model, Jamieson invokes an interregional interaction model of the "Mississippification" of Ontario populations, based on "a diversified network of geographically disparate, albeit overlapping socially and/or ethnically related Mississippian-spurred development" (Jamieson 1992:71). All of these studies represent laudable attempts to move beyond traditional and insular explanations of Iroquoian cultural evolution. Nevertheless, they fail to adequately reconcile their broadened geographical outlook with the complex nature of societal interaction, its underlying motives, and its resultant material expressions.

In the absence of convincing evidence for consistent interregional contact, it is more likely that prolonged and consistent exchange and communication between evolving and more closely interrelated polities, at a similar level of cultural complexity within the Great Lakes region, had a greater effect on the homogenization of Iroquoian material culture in the post A.D. 1300 period than sporadic contacts with more highly structured, but distant, societies to the south. While there may, in fact, have been limited access to, or knowledge of, the material goods produced in Cahokia or its related manifestations (the "core" of the recent models), it is unlikely that these goods or their constituent symbols were incorporated into the material cultures or cognitive systems of local Iroquoian populations without undergoing a process of reinterpretation (Schortman and Urban 1992:237). As will become evident, however, the alternative approach presented below, which is based upon the recognition that Early to Middle Iroquoian society consisted of numerous regionally based and independent (albeit interrelated) peer polities, shares with several of the CPI-based models the desire to more

completely reconstruct the modes of communication and interaction that characterized the Middle through Late Woodland period. It also addresses a growing dissatisfaction with the basic paradigm that has defined archaeological research in southern Ontario for the past three decades.

MODELS OF LONG DISTANCE INTERACTION AND IROQUOIAN EVOLUTION

CPI models have been successfully utilized in a wide variety of archaeological studies as a means of providing an underlying framework for understanding the observed growth of asymmetric, long distance interactions between highly developed societies or cores, and less complex neighbouring groups or peripheries (e.g., Champion 1989, ed.; Frankenstein and Rowlands 1978; Rowlands et al. 1987). A CPI approach is seen as a means of explaining the changes in the political and socio-economic systems of the participants in long distance interactions- changes which are most profoundly experienced, and most highly visible, among the peripheral groups as they become increasingly structured to meet the demands of the core. In the process of this restructuring, peripheries become more and more dependent upon the core in order to meet their own needs for social, if not biological, reproduction. Under such circumstances the nature of interaction among the peripheral groups themselves is likely to be largely dictated by their individual efforts to maintain their relations with the core. Of course, peripheral groups may choose not to participate within an expanding core system, yet such resistance may itself require equally significant change (Dincauze and Hasenstab 1989:77; Rowlands 1987:5).

One of the most fundamental shortcomings of the CPI-based "Mississippification" hypothesis is the failure of their proponents to provide conclusive evidence of mid-continental societies that were capable of acting as cores. The attributes typically associated with cores, such as advanced levels of political organization; marked social stratification; centralized and highly structured modes of economic production, including craft specialization and institutionalized wealth redistribution; dense populations approaching or exceeding the carrying

capacity of their resource base; and the ability to expand and maintain their dominance over long distances, through the use of ideology, sheer force, or by other means, are all problematic in the case of Cahokia and the other major groups of the Mississippi and Ohio drainages. This situation has recently led Jon Muller to argue that "there seems to be no reason to suggest that most Mississippian societies were more than low-level chiefdom-level societies at best" (Muller 1987:11; cf. Smith 1978:479-503).

In order for a CPI-based model of Iroquoian development to be credible, it must be demonstrated that the so-called "cores" of the continental interior were capable of exerting their influence over long distances, and of integrating far-flung polities within intensive and relatively stable networks of interaction. The inability to do so further undermines the entire construct by failing to provide convincing motives for large-scale Iroquoian participation in intense relations with the Mississippian or other southern groups. The Iroquoians are said to have been anxious to take part in such interaction (Hasenstab 1990:20-23); indeed, it often appears that they were driven to do so, although there is little suggestion as to why this should have been the case. Hasenstab (1990: 62) has even suggested that northern Iroquoians were supplying the Cahokian core with animal resources on such a scale that they seriously threatened their own hunting territories. This contention is based, in large part, on an analogy with the documented nineteenth-century New York Iroquois practice of supplying natural resources to European centres on the south shore of Lake Erie (Hasenstab 1990:19-21). Notwithstanding the inappropriateness of an analogy with an historic cash-based reserve economy, it is unlikely, in the absence of coercion, that prehistoric groups would, for example, have knowingly threatened the biological viability of the deer populations of southern Ontario in order to ship skins en masse to the south. There is also no evidence that the apparently autonomous, regionally based Early Iroquoian communities in the Northeast could have undertaken any such concerted action without a more centralized pan-regional political structure.

The simple invocation of a CPI model, by merely identifying the existence of an alleged core which may *potentially* have had an impact on a distant polity, in no way provides an

explanation for observed culture change among the latter group. In the absence of detailed analysis of the specific contextual setting of such a relationship, and without developing an understanding of the mechanisms by which such interaction may have operated (both in terms of articulating the different socio-economic structures of the participating groups, and in terms of initiating social transformations), a CPI model is little different from any other hyper-diffusionist approach (Champion 1989:10). Such an approach undermines the importance of endogenous change, operating as it does under the assumption that contact between different social groups led inevitably to acculturation of the less "evolved" society. Whether such acculturation took place through trade, conquest, or simply because of some innate "superiority" of the dominant culture becomes largely irrelevant and, accordingly, is seldom explored in great detail.

It seems ironic that these recent studies of Iroquoian cultural development, in their attempt to critically examine the implicit insularity of the *in situ* model (MacNeish 1952; Wright 1966), return to the type of southern diffusion hypothesis, if not migration perspective (Snow 1994), that the *in situ* model itself sought to redress. That these arguments have come full circle is a consequence, in part, of the failure of many archaeologists to recognize the inadequacy of the available data for reconstructing the logistical systems, structural contexts and consequences of pan-regional interaction.

At the most basic level, the suggestions that Iroquoian society developed either as a marginal periphery to a Mississippian core (Dincauze and Hasenstab 1989), or as a result of both core-periphery interaction and more lateral relations between peripheral and/or marginal communities (Jamieson 1992), are largely speculative since there is little conclusive evidence for large-scale or highly developed relations between Ontario populations and people in the southeast or midwest. The best evidence for this kind of interaction would be the substantial presence and clearly demonstrated symbolic significance, on peripheral sites, of exotica which are undoubtedly of foreign origin. While materials of this sort were in circulation in Ontario during the Late Archaic to Middle Woodland period (Ellis et al. 1990:118-119; Spence et al. 1990:138, 155-156), they remain elusive for the period in question.

While it may be argued that the exchange of material goods per se is not the prime concern in CPI analyses focusing on questions of dominance and dependence (Champion 1989:11-12; Rowlands 1987:5-9), the fact remains that in the majority of cases where CPI has been applied successfully, the existence of extensive trade connections and their obvious importance in defining both the external and internal relations of the peripheral polities have, to some degree, been recognized for decades.

In southern Manitoba, Mississippian influence has been clearly demonstrated on the basis of Oneota-like artifacts, including large shell gorgets with weeping eyes, miniature ceramic vessels with incised thunderbirds and broken arrows, lizard or salamander effigies, as well as vessels with curvilinear trailed decoration (Nicholson 1994:5-7; Syms 1979:283). In Ontario, however, the extremely small assemblage of identifiable exotica, for the crucial Early and Middle Iroquoian periods, provides a shaky foundation on which to base any similar explanatory approach. In order to circumvent this problem, proponents of pan-regional explanatory models have turned their attention to more basic elements of Iroquoian material culture, such as small triangular point types, certain ceramic attributes such as incised horizontals, and several aspects of the overall settlement and subsistence patterns (Dincauze and Hasenstab 1989:76; Jamieson 1991, 1992).

The underlying assumption of such an approach is that these traits must represent a threshold level of ideological and/or socio-political connectedness between the core and its peripheral or marginal communities. The recent proposal that certain Mississippian ceramic vessels (Ramey Incised) and their constituent design sequences might have constituted active symbols of order, hierarchy, and religious beliefs in a form of socio-ideological communication between Cahokia's elite and its commoners (Pauketat and Emerson 1991), suggests that such artifacts should be identifiable in the archaeological record of communities that participated in the system. There is simply no evidence that Early Iroquoians in Ontario had been exposed to and understood, let alone embraced, the world view or religious iconography of the society that they were supposedly serving. Moreover, it might prove difficult to differentiate symbols specifically representing Cahokian ideology

from pan-Indian symbols also employed by Iroquoians (von Gernet 1992a:136).

Nevertheless, if material culture is an "indirect" reflection of society, in the sense that ideas, beliefs, and meanings interpose themselves between people and their things (Hodder 1986:3) (and notwithstanding the logical circularity of using the same decorative criteria as a basis for both chronology and for social inferences dependent on that chronology), why would Iroquoians adopt symbols that were derived from completely different cultural-historical and therefore structural contexts? Jamieson claims, for example, that "the concept of incised horizontals ultimately is of transitional Mississippian and Mississippian origin" (Jamieson 1992:74, emphasis added). Yet, neither the appearance of horizontal elements nor incising was sudden in Ontario or in other parts of the Northeast. They have been found, both separately and together, on vessels dating to Middle Woodland times (Finlayson 1977:137, 348; Fitting 1972:256-257, 261; Jackson 1979:22; Ritchie and Funk 1973:133; Wright 1967). Incising as a decorative technique has also been noted on Early Woodland wares (e.g., Bush 1975:13-22; Ozker 1982:197; Ritchie and Funk 1973:153), while corded horizontals have been found on early Middle Woodland vessels from a number of sites, suggesting the possibility of a developmental sequence out of Early Woodland Vinette 1 pottery (Jackson 1979:22). The concept of the incised horizontal, therefore, was not introduced, but had been deeply embedded in the mental templates of local potters for at least a millennium prior to the emergence of a Mississippian "centre". Moreover, in that such motifs occur on ceramic vessels throughout the world, one must be careful to distinguish between diffusion and constraints in human cognition and motor skills that lead to independent invention.

Jamieson further argues that other kinds of cultural traits, such as certain bone artifacts or triangular projectile points (Levanna), are "exogenously derived homologues, ultimately of Mississippian origin" that were adopted by late Early Iroquoian communities in Ontario (Jamieson 1992:72). While certain artifact attributes were clearly shared by regionally based, autonomous communities over large geographical areas, their origins are not at all clear. For example, Justice (1987:217) has suggested that Levanna points, which are present in Ontario by A.D. 600 (Stothers 1977),

are derived from Jack's Reef Corner Notched points, which date to the late Middle Woodland period (A.D. 500-800). Sites of the late Middle Woodland Kipp Island phase in New York have yielded both Jack's Reef and Levanna points (Ritchie 1969:228-253). Similarly, Jack's Reef Pentagonal points, a form closely related to Jack's Reef Corner Notched, have been found in association with Levanna points in late Middle Woodland contexts at the Pointe-du-Buisson site, on the St. Lawrence River in Quebec (Clermont and Chapdelaine 1982:86). While knappers from more southerly, contemporaneous communities may also have made and used projectile points similar to these (Ritchie 1971:26), their use in the Northeast predates the emergence of apparently complex Mississippian societies.

Many of the bone tools mentioned by Jamieson also appear to have antecedents in the elaborate bone industries of the Middle Woodland period (e.g., Finlayson 1977:431-453; Kenyon 1986:90-101; Ritchie 1969:231-233). The same is true of polished stone pendants, a particular type of which — cannel coal — is purported to have functioned as a marker of "salient social identity" originating in upper Ohio (Jamieson 1992:74). Yet, after five years of archaeological research involving the excavation of twenty-five Early Iroquoian sites on the Caradoc sand plain of southwestern Ontario (Williamson 1985, 1986, 1990), only one small, green pebble pendant was recovered from among tens of thousands of artifacts. Since these communities represent the westernmost Early Iroquoian populations in Ontario and, therefore, those nearest to Ohio, it is unlikely that the occasional dark-coloured pebble pendant recovered elsewhere in southern Ontario signifies anything other than an individual preference for personal ornamentation. Moreover, there are certainly precedents for pebble and black slate pendants in Late Archaic and Early Woodland times (e.g., Granger 1978:139; Ritchie 1969:116; Ritchie and Funk 1973:154).

That there are clearly antecedent and widely used forms for these artifacts across the Northeast well before Mississippian times attests to the antiquity of regional interaction among autonomous, similarly structured communities. Indeed, there is ample evidence for the emergence and decline of an intensive, long distance exchange system across the northeast, including Ontario, in the Hopewell

phase of the Middle Woodland period (Braun 1986; Brose and Greber 1979). It would appear, however, from the relatively rare presence of marine shell and native copper on Early Iroquoian sites in southern Ontario, that the associated exchange networks (some of which were far-reaching and may have originated in Middle Woodland times) were nevertheless attenuated. Hence, an examination of the prolonged, consistent exchange and communication between groups at a similar level of cultural complexity within the Great Lakes region might provide our best clues for understanding Iroquoian cultural evolution. A potentially fruitful means of carrying out such an examination is through adoption of the concept of "peer polity interaction" as a means of exploring the widespread growth of more complex socio-political structures among Ontario Iroquoians in the post A.D. 1300 period.

PEER POLITY INTERACTION AND THE EMERGENCE OF TRIBAL SYSTEMS

Although the concept of peer polity interaction (PPI) has its origins in the study of spatial and power relations between chiefdoms and early states, it is sufficiently flexible to be applied to small scale situations exhibiting a lesser degree of complexity (Cherry and Renfrew 1986:150; Renfrew 1986:1). PPI has been defined as the "full range of interchanges taking place (including imitation and emulation, competition, warfare, and the exchange of material goods and information) between autonomous (i.e. self-governing and in that sense politically independent) socio-political units which are situated beside or close to each other within a single geographical region" (Renfrew 1986:1). The examination of such interchanges between autonomous political units, or peer polities, may shed some light on the shared structures (political institutions, specialized ritual communication systems, and conventionalized patterns of non-verbal language [Renfrew 1986:11] that suggest that these peer polities together constituted a more broad and recognizable social group.

Fundamental to the PPI approach is the identification of autonomous peer polities. As will be discussed more fully below, it is likely that, prior to the Late Iroquoian period, the self-governing multi-lineage village represents the

maximal political unit. Many such units formed a pattern of discrete regional clusters across southern Ontario, defined by factors of distance or physiography. The growth of stronger communication and exchange relationships between these autonomous peer polities in southern Ontario is of greater significance to the development of the cultural uniformities that have led to the recognition of an increasingly homogeneous Ontario Iroquoian society than are less regularized, external links with other regions (Figure 1). It is at the level of interaction between these individual polities, made up of regional clusters of villages, that the processes which ultimately led to the emergence of larger tribal groupings operated, and it is likely that it is the examination of these intermediate-scale ties that will prove to be the most informative (Renfrew 1986:7).

In order to investigate the relationship(s) between these peer polities, however, we must first abandon the current theoretical paradigm and any of its preconceived notions concerning the socio-political affiliation of those polities. Most previous research has been framed in a model of Iroquoian cultural development (MacNeish 1952; Wright 1966), which in some respects has outlived its usefulness. J.V. Wright's outline of the Ontario Iroquois Tradition proposed three stages of development. The first consisted of a western branch called Glen Meyer and an eastern branch called Pickering; both were thought to have evolved in relative isolation from one another. The second stage, the Middle Ontario Iroquois, was thought to represent the fusion of these two branches, resulting from the military conquest of the Glen Meyer by the Pickering. The final stage, the Late Ontario Iroquois, was thought to reflect a divergence from the middle stage culminating in the historical tribal groupings known as the Huron, Petun, Neutral, and Erie (Wright 1966:94-101).

Two other Iroquoian co-traditions were similarly defined: the Mohawk-Onondaga-Oneida Tradition and the Seneca-Cayuga-Susquehannock Tradition. Wright acknowledged that the three postulated traditions were, in effect, rather simplistic taxonomic tools, but argued that simplicity was necessary to understand the archaeological record (Wright 1966:3). Archaeologists now recognize, however, that complex cultural developments cannot adequately be investigated using superficial models. Indeed, the imposition of

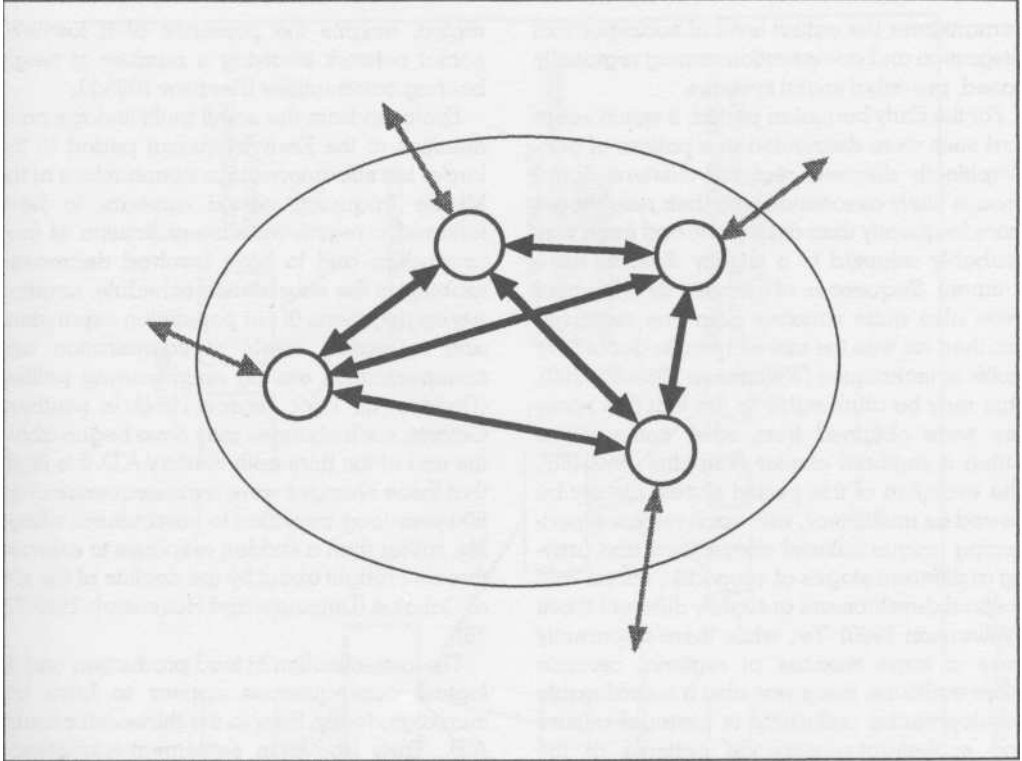


Figure 1. Peer Polity Interaction. Prolonged and consistent interaction between politically autonomous villages within a specific region are of primary significance, whereas interactions beyond the region are less well-developed (after Renfrew 1986: Figure 1.5).

one-dimensional taxonomic divisions such as "branches" on prehistoric societies masks regional variation and discourages "the investigation of dynamic, multi-dimensional lines of socio-political integration" (MacDonald 1993). To his credit, Wright (1966:101) recognized that, in the fullness of time and with accumulation of data, many of his interpretations would be "subject to marked alterations". He has, nevertheless, been tenacious in his defence of certain aspects of the model, such as the conquest hypothesis (Wright 1992), despite overwhelming opinion to the contrary (see Williamson 1990:311-312 for a summary).

The limitations of the original constructs are clearly reflected in the increasing difficulty with which archaeological data are accommodated by Wright's model. Middle and Late Woodland sites in southcentral Ontario have cultural assemblages that share attributes with complexes in southwestern and southeastern Ontario, and the classification of certain Early Iroquoian communities as either Pickering or Glen Meyer is proving as difficult as classifying some Late Iroquoian sites as either prehistoric

Huron or prehistoric Neutral. A break from Wright's model of Iroquoian prehistory is slowly being made. More recently, the use of his taxonomy has served as a convenient tool to simplify communication rather than as a guide for defining discrete cultures (Smith 1990:287-288).

If no rigid taxonomy is imposed *a priori*, the problems inherent in the model disappear. It is suggested, therefore, that Wright's cultural categories based on earlier, incomplete data be abandoned, since their use currently results in confusion. Jamieson (1991:6), for example, argues that the spatial differences within and between Early Iroquoian cultures may be interpreted as reflecting the degree to which *locally developing* groups interacted with other external polities, adopting and integrating diffused traits and ideologies. In the very same paragraph, however, she suggests that the resultant information and communication network permitted *Pickering Branch* domination over the *Glen Meyer Branch*. Abandoning this taxonomy will force researchers to examine the archaeological record in order to

demonstrate the actual level of socio-political integration and co-operation among regionally based, pre-tribal social systems.

For the Early Iroquoian period, it would seem that sites were distributed in a pattern of geographically discrete, regional clusters. Some groups likely associated with their neighbours more frequently than did others, and each was probably adapted to a slightly different environment. Sequences of ceramic development were also quite variable from one region to another, as was the use of specific decorative motifs or techniques (Williamson 1985:289-290). This may be attributable to the fact that spouses were obtained from other communities within a regional cluster (Timmins 1992:486). The evolution of this period should clearly be viewed as multilinear, with each region experiencing unique cultural adaptations and arriving at different stages of economic, social, and political development at slightly different times (Williamson 1990). Yet, while there apparently were a large number of regional ceramic micro-traditions, there was also a considerable developmental uniformity in material culture and settlement-subsistence patterns at the macro-regional level. It is absolutely essential to reconcile these two levels of interaction in order to propose long distance Early Iroquoian population incursions and disruptions (Jamieson 1991, 1992) and to gauge the actual effect of Mississippian traits on the many politically autonomous communities residing in southern Ontario from the tenth through late thirteenth centuries A.D.

There does not appear to have been a social network integrated by cross-cutting pan-residential institutions until the fifteenth century or later (Timmins 1992:483-489). That is, there do not appear to have been fully formed tribal social systems involved in long distance and large scale politics, warfare and exchange until the Late Iroquoian period (Figure 2). Instead, in the course of the consolidation of the smaller and more numerous bands of the Middle Woodland period, food production and the development of corporate lineages and unilineal descent led to the evolution of relatively small and autonomous multi-lineage communities (Niemczycki 1984; Service 1971). It was not until these communities were integrated at a much higher level that tribal systems were formed. It should also be noted that, in many societies, the village represented the most complex socio-political unit attained in a

region, despite the presence of a low-level social network involving a number of neighbouring communities (Renfrew 1986:2).

Evolution from the small multi-lineage communities of the Early Iroquoian period to the larger but still autonomous communities of the Middle Iroquoian period appears to have followed a region-wide intensification of food production and to have involved decreased mobility in the subsistence schedule, community aggregations (if not population expansion), and increased levels of co-operation and communication among neighbouring polities (Dodd et al. 1990; Pearce 1984). In southern Ontario, such changes may have begun about the end of the thirteenth century A.D. It is likely that these changes were a consequence of an 800-year-long transition to horticultural village life, rather than a sudden response to external threats brought about by the decline of the site of Cahokia (Dincauze and Hasenstab 1989:77-78).

The intensification of food production and its logical consequences appear to have occurred gradually. Prior to the thirteenth century A.D., Early Iroquoian settlement-subsistence systems apparently involved villages or base settlements as well as seasonally occupied hamlets which served varying functions (Williamson 1990:312-320). Village sites have yielded evidence of unplanned long-term occupations with numerous overlapping houses that vary in size and internal arrangement. Hamlets, on the other hand, appear to have been occupied in the fall to exploit and process deer and other animals attracted to mast-producing forest, and in the spring to exploit spawning fish. The internal ordering of house features at some of these sites suggests that their occupations may have extended past autumn into early winter, and it is possible that a few were occupied year-round. These data attest to a mixed economy involving horticultural villages. It was around these base settlements that most crops were grown, and from them that hunting and gathering parties, which included men, women, and children, travelled five to ten kilometres to gather and process food and other resources (Williamson 1990:312-320).

Bruce Trigger (1976:134) has suggested that the estimated population (200 to 400) of most of these early sedentary villages falls comfortably within the size range of Middle Woodland spring and summer fishing groups, and that

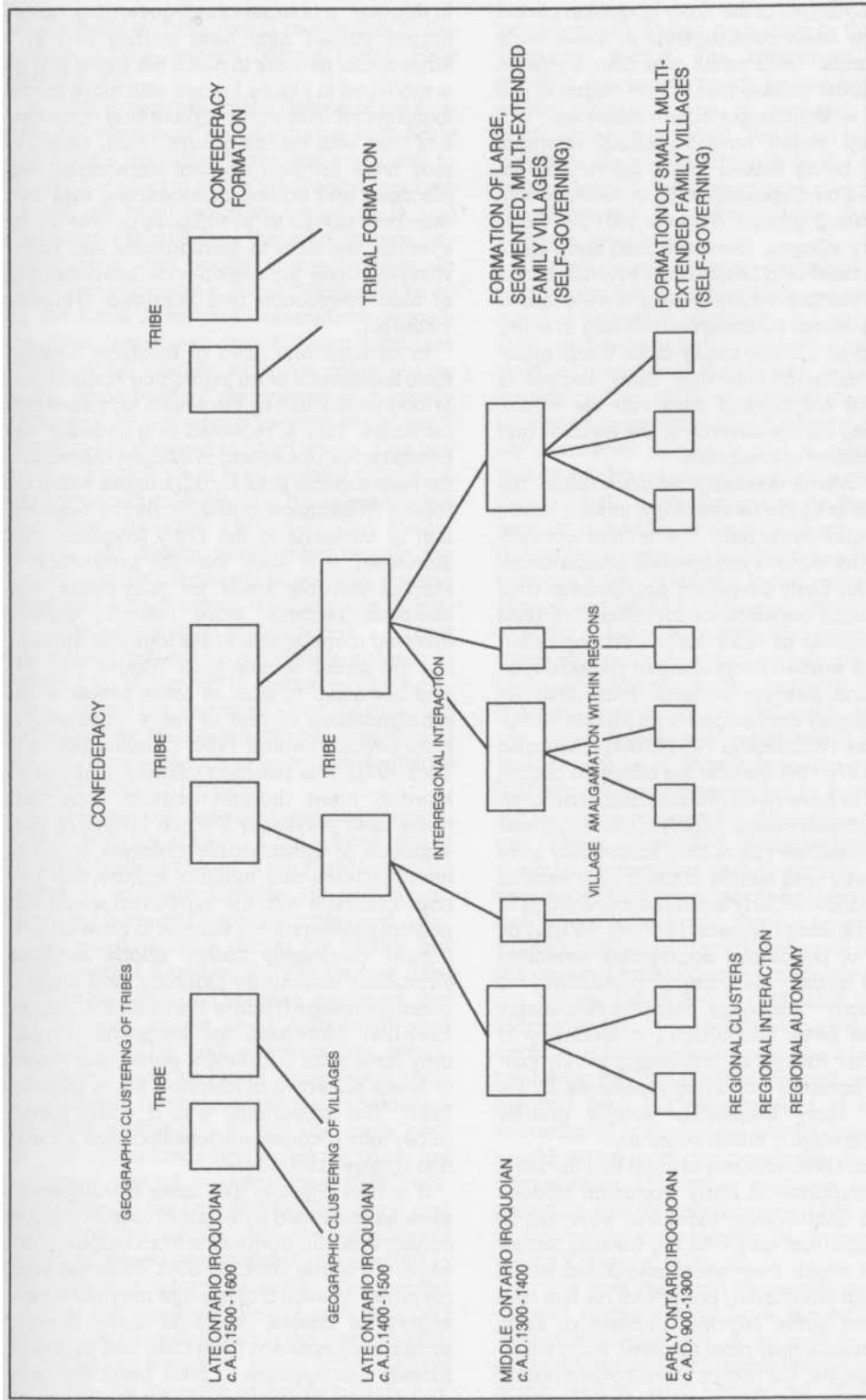


Figure 2. A model of Iroquoian Socio-political Development (modified from Timmins 1992: figure 8.6).

the small villages of the Early Iroquoian period may have been continuations of these early macrobands. Their small size also suggests that separate polities had not yet begun to join together to form larger communities and that leadership would have remained informal, perhaps being limited to an individual who also acted as a spokesperson in dealings with neighbouring groups (Trigger 1981:24). Early sedentary villages, therefore, may have been characterized by a flexible and evolving socio-political structure, whereby people were free to pursue seasonal subsistence activities in either extended or nuclear family units. Some members of these groups may have elected to remain at fall hunting sites into the winter, depending on the severity of the weather and the availability of resources.

Such overall flexibility would explain the variations in house morphology, interior house activity, and seasonally intermittent occupations at the various exploitative camps documented for Early Iroquoian populations. Until an increasing dependence on cultigens forced a realignment of work tasks that separated men from women for prolonged periods, residence and descent patterns may have remained largely unchanged from Middle Wood-land times (Williamson 1990:318-319; see also Trigger 1976:136). Hence, the adoption of corn appears to have been gradual and characterized by conservatism. When horticulture was first practised, the risk of crop failure may have been great, and simple caution may explain the reluctance of Early Iroquoians to engage in full-scale farming (Bronson 1977:34). As long as the size of population aggregates remained relatively small, the natural productivity of some Early Iroquoian micro-environments seems to have encouraged a tendency to reduce risk factors by continuing to rely partially on naturally occurring resources. In this manner, Early Iroquoians sought greater security through a mixed economy.

Timmins (1992:485) has argued that the long-term occupancy of Early Iroquoian villages suggests that village locations were highly valued, and that they and the hunting territories with which they were associated would have been tenaciously protected. He has also noted that some regional clusters of Early Iroquoian sites may have involved, not a single site sequence, but two or more contemporary communities that may have shared a hunting territory or some other common resource base.

In this way, a number of self-governing, autonomous polities may have participated in a large social network in much the same way as is modelled in Figure 1, each with more meaningful social links with neighbouring communities than with distant groups. Such networks may have involved spousal exchanges, war alliances and trading relationships, and may even have served to "predispose people for the eventual decision to amalgamate into larger villages", once the region-wide intensification of food production had occurred (Timmins 1992:486).

In at least one area of southern Ontario, there is evidence of an increasing commitment to food production by the twelfth and thirteenth centuries. This is reflected in a growing emphasis on the placement of villages adjacent to the most suitable soils for agriculture within the region (Williamson 1985:326). As the contribution of cultigens to the Early Iroquoian diet increased, it is likely that the production of surplus storable foods for year-round consumption became more reliable, thereby allowing more people to live together throughout the winter season (see Trigger 1981:24), and resulting, at least in some areas, in the amalgamation of one or more autonomous local polities (Pearce 1984; Timmins 1992:487; Tuck 1971). The resulting villages, situated on heavier, more drought-resistant soils than those used previously (Pearce 1984:287), yield evidence of considerable changes in settlement patterns and material culture that perhaps correlate with the significant social and political developments thought to have accompanied community fusion: village councils, formalized community planning, and multiple social groupings (Pearce 1984:293-304; Trigger 1990:124). Moreover, the fourteenth century may have seen substantial population growth to levels observed in historical times (Warrick 1990). This apparently was a consequence rather than a cause of intensified food production (Trigger 1990:124).

It is also possible that these developments were exacerbated by external factors such as conflict with non-Iroquoians from neighbouring regions (Pearce 1984:330-334). While the initial response to such a challenge may have been somewhat limited, it would have become increasingly systemic if the risks had persisted; indeed, this appears to have been the case, even into the historic period. It is the change in social relations, or the organized response to

such events or risks, that is observable in the archaeological record (Braun and Plog 1982:506-509).

In order to reconstruct the degree of relatedness between peer polities during both Early and Middle Iroquoian times and eventually to identify the point at which tribal social systems formed, we must reach an understanding of exchange systems and the relationships between style and social connectedness. In traditional Iroquoian cultural-historical schemes, the main underlying assumptions regarding style have been that ceramic attributes reflect ethnic identity, and that, more importantly, socio-political dominance is normally evidenced by increasing frequencies of traits belonging to the predominant group. This is a notion for which there is substantial contradictory cross-cultural evidence. It has been noted elsewhere (Hodder 1978a:4-9) that vessel shapes and design motifs often remain the same among a conquered population, despite significant acculturation. Furthermore, invaders might intrude upon settled populations and their arrival may not be identifiable in ceramic patterns for a number of centuries. The traditional approach assumes that potters too easily accept the legitimation of control and are quick to embrace a new and dominant ideology (Hodder 1986:26).

If, however, one accepts regional heterogeneity in both the socio-political sphere and in the artifact assemblages of the Early Iroquoian period of southern Ontario, as well as an increased homogeneity in ceramics and community amalgamation during the Middle Iroquoian period (Dodd et al. 1990; Pearce 1984; Williamson 1990), it becomes apparent that four ceramic trends need elaboration and explanation. The first concerns the extent, nature, and reasons for the widespread sharing of certain ceramic technique and decorative motif attributes (e.g., the shift away from the coil manufacturing technique and the increased use of cord-wrapped stick treatments) during the Late Middle Woodland and Early Iroquoian periods, given the autonomy of regionally based communities as reflected in their ceramic micro-traditions. The second involves the apparently rapid and dramatic changes in ceramics during the Early to Middle Iroquoian transition (circa A.D. 1300), in particular, the increase in the manufacture of collared vessels and the use of horizontal motifs. The third is the overall decreasing

complexity in design beginning in the Middle Iroquoian period. The latter may, in part, explain the fourth trend: increasingly more subtle manifestations of regional variation during this same period. This is not to deny the antiquity of regional diversity in the archaeological record, but to recognize certain broad developments in ceramic style during the period in question.

Central to all of these questions are the interrelationships between the use or appearance of individual attributes or combinations, their cultural-symbolic context, and socio-political changes in the society. Achieving an understanding of these interrelationships is rendered more difficult by the fact that a society's material culture is not a static entity. Individual objects pass through "life-cycles"; as their contexts of use change, so do their meanings or cultural significance. Such changes during the course of an object's use represent changes in the underlying human relationships (Appadurai 1986:17-22; Barrett 1987:8-9).

While some researchers who support long-range regional interaction models are pointing to the diffusion of specific elements or traits, it is argued here that horizontal motifs, for example, were already well implanted in the symbolic repertoire of Ontario Iroquoians and that increased local exchange led to increasingly simple and homogenous decorative sequences. These constituted changes from previously more complex and regionally variable sequences that accompanied changes in diet and in household and community sizes. The intensification of food production and the onset of increased exchange were mutually reinforcing events. David Braun (1986:123) has similarly argued that the stylistic standardization of certain ceramic vessels, recovered from sites involved in the Hopewellian interaction sphere, resulted from the development of symbolic redundancy in exchange activity among both neighbouring and geographically separated communities. He further suggests that such uniformity was deliberately sought as a means of reinforcing membership in an expanding network of social relations.

In this way, the most frequently expressed cultural markers may have symbolized the "salient affiliations" of a group, making it easier to identify membership since these cues were highly visible and redundant (Schortman 1989:53-57). Consequently, these symbols should find lasting expression in the archaeo-

logical record. In that exchange networks were grounded in negotiation and social obligation, they may have dissolved if they were not regularly reaffirmed, despite the fact that the exchange of goods may have occurred along the same social lines as the exchange of marriage partners (Braun and Plog 1982:511), at least in Early Iroquoian times. The higher frequency of collared vessels and the use of incised horizontals may be interpreted as an expression of evolving closer social ties between regional peer polities. These closer ties and the resultant ceramic standardization are significant changes from an earlier, less structured sharing of ceramic traits, based on less regular intercommunity interaction during the Early Iroquoian period — a level of interaction that resulted in less but still observable developmental uniformity across the Northeast.

Thus, while there may have been greater variation between neighbouring communities during the Early Iroquoian period, the introduction of even minimal restrictions on the acceptance of ceramic innovation, as perhaps was the case in the Middle Iroquoian period, may have resulted in broad areas losing their regional distinctiveness. In such cases, cultural differences may have diminished with time, and eventually boundaries may have lost their definition, resulting in gradual spatial variation in cultural content and ceramic expression (Barth 1969:36; Hodder 1978b:253). It should nevertheless be recalled that, while there was certainly a greater expression of coherence among Middle Iroquoian groups, there may have been other ceramic attributes in the same communities that reflected the expression of group separateness and identity (see also Nicklin 1971:27-29). Here, perhaps, lies a clue to understanding the increasingly subtle manifestations of regional variation during the Middle Iroquoian period in Ontario.

Yet, increasing ceramic uniformity may not have been simply a behavioural reflection of a new social identity. Symbolic communication results from a common understanding of a set of rules regulating the organization and meaning of symbols. In this way, material culture can be understood as a "symbolizing behaviour" that has "functional utility and a logic of its own, which is not directly observable as pattern or style" (Hodder 1982:7). For any explanation of observed patterns to be convincing, it must also make reference to this hidden or underlying structure.

Meaning is derived from the associations and use of an object, and there is a need to investigate the relationship between the structural context of the object and the symbols used to decorate the object. It is through a shared understanding of symbols that items come to represent society, although we are uncertain how social relations are translated into material symbols. While it has been argued that symbols are organized to maximize the flow of information (Hodder 1982:10), we have not yet even determined how they are regularly used in our own cultural contexts, let alone those of the distant past. This should lead us to more cautiously explore the meaning of attributes with respect to economic or socio-political transition, particularly when some of the decorative attributes that are found on cooking and storage vessels, for example, may symbolize functional categories and not temporal, spatial, and/or ethnic variation. Incised horizontals, for instance, occur on less than ten percent of Early Iroquoian ceramic vessels (Williamson 1985:286-288) and on approximately forty to fifty percent of Middle Iroquoian vessels (Dodd et al. 1990:335-337). If pots decorated with horizontal motifs were used for the preparation, storage, and consumption of maize soup, it might be argued that these frequencies reflect not a new social identity but, rather, the growing role of corn in the diet, as this crop may have contributed forty to fifty percent of the daily caloric intake by Middle Iroquoian times (Schwarz et al. 1985). Alternatively, Ramsden (1990:176-177) has argued that the changes in ceramic vessel form and decoration from Middle Woodland to Late Iroquoian times symbolized changing perceptions of space and boundaries that were intimately linked with major shifts in settlement and subsistence patterns and burial systems.

Whatever the meaning behind the changes in design sequences on ceramic vessels from Early to Middle Iroquoian times, the changes were rapid and widespread, encompassing most of southern Ontario and northern New York State. It seems most likely that this resulted from an expanding network of trading partnerships. Spence's (1982) conclusion that Middle Woodland societies were ranked implies that trading relationships were limited in number and scope at that time. With the evolution of multi-lineage communities and the eventual transition to more formalized tribal

social systems, however, the number of lineage based trading relationships within the community and the overall social network probably increased dramatically, resulting in significant impacts on the potters of the communities, especially if these relationships occasionally constituted avenues of exchange for marriage partners. At the very least, the amalgamation of neighbouring villages in the early fourteenth century should have, by logical consequence, resulted in a heightened level of familiarity among fewer communities, provided village exogamy was still practised and communities looked to adjacent villages for marriage partners. This may have led to an "unprecedented level of inter-regional interaction and integration" during the Middle Iroquoian period (Timmins 1992:487). In fact, Timmins has noted that the widespread adoption of incised horizontal motifs occurred so rapidly that it seems to have been a generational phenomena as suggested by the different frequencies in juvenile (25%) versus adult (6%) assemblages in the late thirteenth century occupation of the Calvert site (Timmins 1992: 488).

Ultimately, in order to construct a new cultural-historical paradigm, detailed symbolic archaeological analyses will be necessary to determine which ceramic attributes signalled new, more complex, socio-political identities and which represented temporal variation or functional categories. Similar analyses will be required of other artifact classes, and it will be necessary to link these developments within a chronological framework of intensified food production and concomitant changes to settlement patterns at the house, community, and regional levels. As Timmins (1992:483) has clearly stated, our ability to understand the evolution of Iroquoian tribal social systems rests largely with our success in recognizing the various stages of the evolution of extended families, lineages, clan segments, and villages in the archaeological record. It will also be necessary for researchers to proceed with focused examinations of local sequences and to resist attempts to fit their ceramic data into elusive categories such as Glen Meyer or Pickering (e.g., Bursley 1994).

Dincauze and Hasenstab's (1989:70) objection to ecological-social models is that they fail to account for the uniqueness and development of Iroquoian culture. They also point to the rapid diffusion of cultigens and question the "failure" of Algonquian and Iroquoian

groups to converge culturally. It has become increasingly apparent, however, that in some regions the distinctions between Iroquoian and Algonquian are not as sharply defined as was once believed. Where environmental conditions permitted, some Algonquian groups certainly did practice maize horticulture (Fox 1990:471; Murphy and Ferris 1990:263). Other groups who inhabited areas (such as the Canadian Shield) which were unsuitable for horticulture display among their material culture certain traits which have been traditionally regarded as "Iroquoian" (Fox 1990:463). Recent research has forced us to continue to re-evaluate our assumptions concerning a direct link between ethnicity and material culture (von Gernet 1992b:122-123, 1993:77) and to consider the political and social circumstances that surrounded the original definition, during the contact period, of a marked dichotomy between "Iroquoian" and "Algonquian" groups (Moreau et al. 1991:58).

Once the traditional paradigms are abandoned, however, and we are able to reconstruct the long-term regional evolution of peer polities across the Northeast, it may become evident that these polities responded, at least initially, to external influences in different ways and at different times, depending on the structure of the social network in which they were involved. Indeed, it was into these polities, with cultural traditions extending back at least a millennium, that cultigens were first introduced, perhaps within the same Ohio-based exchange systems that centuries before had provided exotic goods of a different form. While the gradual progression toward the intensification of food production had been set in motion by the introduction of cultigens in the late Middle Woodland period, the following millennium of cultural change, including the development of matrilocality and matrilineality, clans, and tribal systems, was more likely the product of endogenous change among region-ally based polities, rather than exogenous influences resulting from interaction with a more complex society to the south.

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