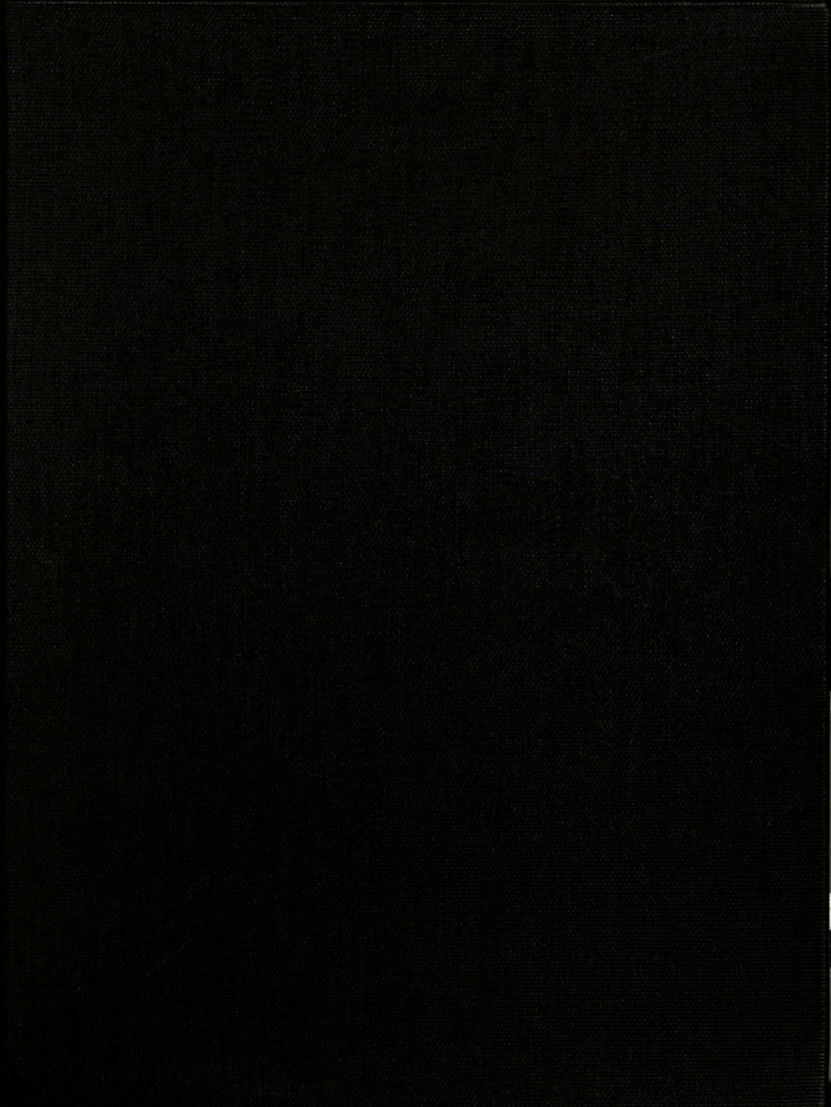






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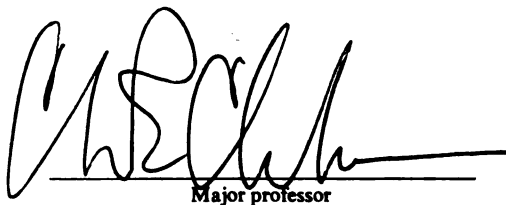
DECISION-MAKING PROCESSES IN A CULTURE CONTACT CONTEXT:  
THE CASE OF THE TIONONTATE HURON OF THE UPPER GREAT LAKES

presented by

Susan Margaret Branstner

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DECISION-MAKING PROCESSES IN A CULTURE CONTACT CONTEXT:  
THE CASE OF THE TIONONTATE HURON OF THE UPPER GREAT LAKES

By

Susan Margaret Branstner

Volume I

A DISSERTATION

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ABSTRACT

DECISION-MAKING PROCESSES IN A CULTURE CONTACT CONTEXT:  
THE CASE OF THE TIONONTATE HURON OF THE UPPER GREAT LAKES

By

Susan Margaret Branstner

This study focuses on the problem of a complex egalitarian culture group's decision-making in a contact context. The goal is to model the processes of decision-making and to explain the reactions and behaviors of indigenous populations who come under the influence of foreign cultures. Suggesting that the decision-making process allows for the study of information flow, through individuals and the system, then problems, solutions, and decisions can be addressed. Acculturation theory is not considered to be an adequate method for study, because of its unicausal/unidirectional orientation, which concludes that there was swift and eventual deterioration in the integrity of indigenous cultural systems.

The methodological approach is founded on general systems theory, applied as an approach to organize the model and data. The model of decision-making assumes that a culture system is an information system, and behavior of individuals is regulated through shared group norms. Expectations regarding the behavior of the subsystems focus

on decision-making processes for adaptation, incorporation, and accomodation of new elements.

Relevant historical and archaeological information pertaining to the Tionontate Huron is applied to the model, resulting in several general statements of behavior: (1) technological subsystem data indicate that the Huron expanded precontact trade networks to accomodate new options upon European contact; this did not result in transformation to a market economy nor the rise of a wealthy class, (2) ideological subsystem data indicate that, while some Huron chose to incorporate Christianity into their system, others remained 'traditional' without producing factionalization, (3) social subsystem data reveal the continuity of egalitarianism and reciprocal relations, manifested through clan and matrilineal/local rules.

The application of a case study to this model has proven to be worthwhile, with conclusions drawn that the model can account for: (1) individual decision-making behavior, stimulating group consensus-based decisions, (2) adaptive strategies and active participation in decision-making by Native Americans, (3) the fluid/flexible nature of complex egalitarian culture groups, where incorporation and adaptation are mechanisms to regulate the impact of contact, and (4) change, with simultaneous system continuity.

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1991

This is dedicated in the memory of  
Norman H. Cole, Sr., Dr. Richard E. Flanders,  
and Kenneth A. Knecht.

## ACKNOWLEDGEMENTS

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In the field, over 40 students assisted with excavations at St. Ignace, and I thank them all, especially Sean Dunham, whose humor cannot be matched. The St. Ignace Downtown Development Authority and Michigan State University Department of Anthropology and The Museum provided support for the field research.

My family and friends provided some of the most valuable support, by constantly asking "Are you done writing your dissertation YET?" Mom, Dad, Mark, and Nanny - my sincerest thanks. A special thanks to Robert Sposito and the Huron Landing Restaurant for providing wonderful meals and friendship during all the years I spent in St. Ignace.

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## CHAPTER 1: Introduction

### I. The Problem

The research problem of this study addresses complex egalitarian cultural system decision-making processes in a culture contact situation. The goal of this research is to develop a model within which to examine the processes of decision-making. It is felt that such a model is needed in current anthropological and ethnohistorical research because existing theories focus on acculturative processes. Thus, a rigorous method that allows for adaptive and creative processes is needed. This model will delineate the types and contexts of an indigenous egalitarian culture group for adaptive strategies, through decision-making processes, in a culture contact context.

This research is founded on the understanding that culture continuity and change are not mutually exclusive processes. Likewise, accommodation, adaptation, and resistance are complementary strategies of the decision-making processes. The formulation of decision-making processes will produce a model which can be utilized with other cultural data sets, if the basic social organization criteria are met. Herein lies the benefits and utility of fundamental model building: the applicability to a variety

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of test cases, from the San to the Nunamiut, strengthens the model as a cross cultural research and explanatory tool.

The theoretical perspective of this research is founded on acculturation theory, adaptation studies, and decision-making strategies (Hopkins 1964; Brown 1979; Hoffman 1979; Fisher 1980; Oestreicher 1981). This approach is utilized to provide an historical perspective of culture contact studies, and to build upon existing theoretical tenets. The methodological orientation for the model is based on a general systems approach, where variables comprising a cultural system are considered integral to the operation of the whole system (cf. Clarke 1978; Renfrew 1979:295-298; Jochim 1981:2-11). The archaeological and ethnohistorical data of the Tionontate Huron of the upper Great Lakes will be the case study to test and evaluate this model. This is an appropriate group for study because there is evidence from the early historic documentary record which suggests that the Huron were organized socially as a complex egalitarian cultural group. Thus, there is existing archaeological and historical data upon which to draw for application to the model.

Chapter 1 will introduce general anthropological and sociological concepts considered relevant to the topic. An overview of acculturation will be presented and the current positions on adaptation will be reviewed.

Chapter 2 will introduce and delineate the methodological approach to be utilized throughout this

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study. The general systems approach and its associated subsystems will be outlined, and parameters for this study will be discussed.

In Chapter 3, the utility and necessity of modelling social and cultural processes will be considered. The historical and theoretical foundation of decision-making behavior, particularly within the fields of psychology and sociology, will be presented as foundational information for modelling purposes. The model of decision-making processes will be constructed, with specific subsystem expectations postulated based on the processes of decision-making.

Chapter 4 will discuss the structure of decision-making in conjunction with general subsystem expectations derived from the set of specific propositions set forth in Chapter 3. The decision-making model will be tested in Chapters 5 through 7, utilizing archaeological and historical data derived from the study of Huron Native Americans from the precontact period through the mid-eighteenth century.

Chapter 8 will summarize the results of the study and evaluate the appropriateness of utilizing a model of decision-making to study cultural contact and change.

## II. Concepts Relevant to the Problem

There are several anthropological concepts which will be explicated due to their foundational nature to the discussion of decision-making. The discipline of anthropology has been plagued for several decades by "ambiguous and inexplicit terminology" (Clarke 1968:19).

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Thus, assumptions will be made about a particular concept, which will then be characterized, as opposed to the presentation of "fixed" definitions. Concrete definitions, of terms such as 'culture', 'ethnicity,' 'tribe', are difficult to agree upon, in part because the meaning can vary with the context.

Concepts relevant to this study that will be addressed include: (1) complex egalitarian culture group, (2) general systems approach, (3) culture change or acculturation, (4) adaptation and adaptive studies, and (5) decision-making. These concepts are considered to be pertinent to this study because they provide the conceptual anthropological framework around which the model will be built. For example, this model would not be applicable to all forms of social organization, because of the differing systems of leadership, ranking, stratification, and so on. To create a model applicable to all types of social organization would result in such generalizations; it would not be useful. For purposes of this study, a particular concept will be introduced according to characteristics pertinent to the overall problem, with historic perspectives and debates discussed where relevant.

#### A. Complex Egalitarian Culture Groups

The operational factor of 'egalitarianism' cannot be characterized before the concepts of 'culture' and 'group' are outlined. There are nearly as many definitions of 'culture' as there are introductory anthropology texts

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(Kroeber and Kluckhohn 1952). Scholars often devise their own definition, adding to or refining previous interpretations of the meaning of culture. It is for precisely this reason that a static definition of culture is not attempted in this study. Rather, traits relevant to the concept of culture, and therefore consonant to the model of decision-making under study, are considered more appropriate.

One of the first scholarly definitions of 'culture' was written by Sir Edward Tylor, a British anthropologist, who proposed that culture is "that complex whole which includes knowledge, belief, art, law, morals, custom and any other capabilities and habits acquired by man as a member of society" (Tylor 1871:1). Since that time, over two hundred alternative definitions have been proposed, most in an effort to refine the concept of culture. Kroeber and Kluckhohn studied these definitions in an effort to reach a consensus meaning of what 'culture' is (Kroeber and Kluckhohn 1952). Kroeber and Kluckhohn concluded that culture is characterized as the rules of society. These rules organize the behavior of societal members, with the behaviors falling (theoretically at least) within a range of variability acceptable to other society members. This explanation presents the most basic elements of culture and is considered appropriate for this study, which will focus on the processes of decision-making within a set of cultural rules.

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A variety of definitions of 'group' can be found, particularly in the body of literature pertaining to formation and maintenance of groups (cf. Hoffman 1979; Fisher 1980; Kowitz and Knutson 1980). For purposes of this discussion, group is characterized by several aspects that are essential elements to the concept, including: (1) a number of individuals who define themselves as members of the group, (2) members who interact according to established patterns, rules, customs (or the culture), and (3) have tasks that are related to maintaining the group in relation to the social and natural environment (Hopkins 1964:10; Hoffman 1979:159-183). Although these are instrumental elements of a group, they are not exclusive characteristics. Other rudimentary aspects of a group include conformity and cohesion of members, where the group operates as an open system<sup>1</sup>. The group also has the capability to gather, process, and retain information (and create solutions) pertinent to the operation of the group.

There are a variety of types of groups, which will be referred to here as 'cultural groups' or 'culture systems'<sup>2</sup>. Culture systems can be simple or complex, generally referred to by cultural evolutionists in anthropological literature as 'bands', 'tribes', 'chiefdoms', or 'states'<sup>3</sup>. This study is concerned with the type of culture system referred to in anthropology as 'tribe'<sup>4</sup> (Middleton and Tait 1958; Radcliffe-Brown 1958; Gluckman 1965; Service 1967; Sahlins 1968). The term 'tribe' is another anthropological term

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that has many definitions, such that its usage is hampered by its ambiguity (Fried 1969:5).

'Tribe' is characterized as an anthropological concept and presented by its constituent parts, which comprise a 'complex egalitarian culture group'<sup>5</sup>. The discussion of this form of social-cultural organization consists of the characteristics and functions of a complex egalitarian cultural group. Many of these characteristics comprise rules and norms within theoretical bounds, and do not necessarily constitute the reality of the situation practiced in daily behavior. They do, however, provide a frame of reference for evaluation and study.

Egalitarianism is a central aspect of the type of culture group referred to as tribe. There is little or no ranking or stratification of positions, roles, or groups in this form of culture system, although status may be achieved. Braun and Plog refer to this aspect of the culture system structure as 'nonhierarchical' (1982:504). Group members are basically equal and they foster this egalitarianism through reciprocal exchanges of gifts, in service or materials. Reciprocity functions as an attempt to assure family survival during times of shortages of food or goods (Morgan 1901; Tooker 1964).

There are no structured or formally sanctioned professional positions, although there may be part-time specialists, such as the shaman or medicine man. Group 'leader' positions are not ascribed or hereditary, but

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achieved. These 'chiefs' do not lead by order or directives, but through charisma, ability, and by setting a respectable, honorable example (Tooker 1964; Kinitz 1965).

Overall group membership is ascribed and kin-based, which may be reckoned through matrilineal and/or patrilineal descent. This is usually manifested in the form of families or households, which are relatively permanent aggregations (Service 1967:20). Families are organized, in part for marital purposes, into clans. Members of each clan reckon their relationship to a common ancestor<sup>6</sup>, and marriage is, in theory, clan exogamous.

Within the culture system, there are also special societies with non-kin based membership. These societies<sup>7</sup> function as cross-cutting residential institutions to perform manifest functions, such as warrior or medicine societies. These kin and non-kin based aspects of a culture system function to link the group members socially and politically, affording individuals with membership and identity in families and other institutions. These memberships are crucial in times of hardship because an individual can find fellow members across the landscape.

The integration of these characteristics allows for functional assumptions to be made about the operation of a complex egalitarian cultural group. The structure of this form of cultural integration and, more specifically, reciprocity, transmit material and information throughout the cultural system (whether intra- or inter-culturally).

The clan and non-kin institutions provide lines of communication, cooperation, control (through coercion), and consensus, in effect guiding the group through the behavioral rules of the culture. The egalitarian or nonhierarchical aspect is an essential component to the decision-making process. In this form of social integration, decision-making occurs through consensus, rather than through the exercise of power by a formally sanctioned authority<sup>8</sup> (Hopkins 1964). This fundamental outline of egalitarian culture groups is intended to provide the foundation principles for the discussion of a type of social organization, general systems analysis, culture systems operation, and processes of decision-making.

#### B. General Systems Approach

The methodology within which to examine decision-making processes of a complex egalitarian culture group will be based on the general systems approach (Boulding 1956; Buckley 1968; Watson et al. 1971; Clarke 1978). The general systems approach<sup>9</sup> defines a "culture system" as a functioning set of subsystems or variables that are interrelated, so that a change in one affects the others and the system as a whole (Boulding 1956; Buckley 1968; Redman 1973; Clarke 1978). The detailed examination of the principles of the general systems approach will be presented in the next chapter.

For purposes of these introductory comments, it is believed that utilization of a system framework methodology

is best suited for this study, because of the fluidity and flexibility of culture systems, information flow between the interconnected subsystems, and feedback. The operation and maintenance of a culture system consists of complex processes, manifested by way of the multitude of interconnecting parts, which are organized by information and energy flow within a particular environment. Renfrew (1979:295) notes that "the power of systems theory lies in its ability to consider simultaneously and systematically both the behavior of the constituent parts and of the whole complex unit which they form". The general systems approach, as it is applied here, is an organization approach to systematize the culture, its parts, and relevant data. The general systems approach allows for a culture system to be dissected, the parts studied, and then the system reassembled. Herein lies the strength of utilizing the general systems approach: the culture system's parts can be isolated, studied, and conclusions compared within the system, to look for disparities, irregularities, anomalies, or patterned behavior within and between portions, and the ramifications for the behavior of the whole system.

#### C. Acculturation: An Historical and Theoretical Perspective

The interplay of foreign and indigenous cultures has been of long-standing interest to anthropologists, historians, ethnohistorians, and archaeologists. Culture change, as a consequence of this interaction, can manifest itself in the archaeological and historical record in many

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ways, particularly through changes in technology, modes of manufacture, subsistence economy, ideology/cosmology, social, and political institutions.

From the outset of culture contact studies in the 1930s, it has been virtually an anthropological maxim that cultures change as they come in contact with one another. These studies conclude that the culture with the more "advanced" socio-political, economic, and technological systems override the "weaker", usually indigenous culture (cf. Herskovitz 1938; Redfield 1953; Spicer 1961; Woods 1975; Heidenreich and Ray 1976; Krech 1984; Yerbury 1986; Jaenen 1976). More specifically, it has been a long standing anthropological and historical conclusion that European contact with native populations resulted in a quick and thorough acculturation of indigenous technological, socio-political, economic, and ideological systems as the indigenous population moved rapidly towards participation in a market economy (Hunt 1940; Bailey 1937; Innis 1956; Upton 1979; Morrison 1984; Axtell 1985; Trigger 1985; Yerbury 1986). Ralph Linton summarized the early position on acculturation when he wrote that "in all cases of directed culture change the dominant group singles out certain elements of the subject group's culture for attack and also selects certain elements of its own for imposition" (1940:9), and he found blocking pre-existing culture traits to be more harmful than the introduction of new ones.

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'Acculturation' is another term in the long list of misused and complicated anthropological concepts. Nearly 40 years after the introduction of acculturation as a concept, anthropologists still need to formulate new ways to address the processes of culture contact and new terms to describe these processes. This does not mean one method is right and another wrong, but rather that we must maintain dialogue and study of these issues if we are to maintain our ability for critical thinking and theoretical growth.

A standard definition of acculturation is the process "whereby the culture of a society is modified as a result of contact with the culture of one or more other societies" (Gillen and Raimy 1940:372). Acculturation became a major topic of study for anthropologists in the 1930s and 1940s, with such seminal works as Linton (1940) and Redfield (1953) resulting in a body of literature constituting acculturation theory. Native American acculturation has often been held to be a one-way phenomenon, with the indigenous group forced to take on dominant European culture traits for survival, although Europeans were supposedly under no pressure to do the same. In early studies (Hunt 1940; Bailey 1937; Innis 1956; Blasingham 1956; Linton 1940), the net result of acculturation was thought to be the wholesale elimination of native culture traits, socio-political institutions, and material culture. Acculturation, even within the last fifteen years, has been viewed as the total abandonment of native culture with a one-for-one exchange, particularly in

the areas of material culture, technology, and ideology, which supposedly resulted in the social disintegration of the native group (Spindler and Spindler 1971; Brasser 1978; Yerbury 1986; Upton 1979).

Acculturation theory encompasses several methods for research developed in the last 40 years. For example, Vogt (1960) proposed a "stage" model for acculturation including a contact stage, reciprocal stage, dynamic stage, polarized stage, and assimilation stage. Bloom (1954) looked at acculturation through boundary-maintaining and self-correcting mechanisms, flexible and rigid systems, cultural fusion, assimilation, reactive adaptation, and cultural disintegration. Dohrenwend and Smith (1962) formulated a 'theory of acculturation' which entailed the study of the absorption of the indigenous culture by a European power, providing a framework for acculturative concepts. Spicer (1961) has re-assessed Linton's (1940) directed and non-directed contact situations. Murphy and Steward have looked at parallel acculturation processes by comparing the Montagnais and Mundurucu (1956), concluding that the process of a gradual shift from a traditional subsistence economy to greater dependence upon trade is irreversible, provided that access to trade goods is maintained. These acculturation treatises and related approaches, such as world systems modeling (Wallerstein 1980; Hopkins and Wallerstein 1980, 1982; cf. Leone and Potter 1988:3-7), inherently imply a

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hierarchical ordering of processes and imply a passive role undertaken by native populations.

In the past, many of these ideas appealed to archaeologists, particularly since material culture change or replacement was considered to provide an indication of the degree of change within a given culture (Brasser 1978; Upton 1979; Mason 1988). Acculturation, or indigenous culture disintegration, is the underlying assumption of this change. Some studies rely on the quantification of European versus traditional items to measure the degree of acculturation (Fitting 1976a). Several studies of culture contact suggest that the adoption of the European material culture assemblage by an indigenous population resulted in change of the traditional technological system, and thus, disruption and disintegration of the culture group's identity (Townsend 1973; Ray 1974; Martin 1975, 1978; Bishop and Ray 1976; Heidenreich and Ray 1976; Clifton 1983; Krech 1984; Yerbury 1986; Bradley 1987; Trigger 1987). Yerbury (1986:17) states that the importance of material goods was the impetus for change, and that the influx of trade goods on an indigenous group could be of significant magnitude to induce cultural change, before Europeans ever arrived in the area. The meaning of this 'cultural change', in terms of form, impetus for decisions, and magnitude, is all too often left ambiguous in recent studies. 'Culture change', as an anthropological concept, can have implications for the status of a cultural group's integrity, viability, and

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identity. Thus, 'culture change', in terms of what has actually changed in a culture group's system should be considered, and this is where decision-making allows for the treatment, the processes, and the explanation of actual outcomes of change.

#### D. Adaptation Studies Reviews

Studies within the last decade have demonstrated that the subject of culture contact and change (heretofore referred to as acculturation) is a more complex process than previously proposed by traditional acculturation inquiries, and that adaptation and the possibility of persistence or maintenance of group identity despite contact must be addressed (Fisher 1977; Ray and Freeman 1978; White 1983; Anderson 1984; Robinson et al. 1985; Fitzhugh 1985; Crosby 1988; Clifton 1989). Although this is a step in the right direction, it does not go far enough towards the explanation of the processes involved in change. These studies generally focus on the net result of contact (i.e., loss of identity or ethnic persistence in spite of change), but not the processes that formulate the path to the net result (i.e., what is the process of choices and decisions made to maintain "ethnic persistence" or adapt or change?). It is necessary to assess the kinds and degree of problems, stimuli, choices, risks, reactions, management options, and solutions in the decision-making process of an indigenous group before change or continuity of the cultural system can be addressed. This study will look at the processes of

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decision-making in a culture contact situation, in a systematic and replicable format for future studies of complex egalitarian culture groups.

As the trend of study for culture contact and change has gradually moved away from an acculturation theory framework in the last 10 to 15 years, it has gradually moved towards the study of adaptive techniques and responses developed and implemented by indigenous populations (Braroe 1975; Guillemin 1974; Trigger 1984; Anderson 1984; Fagan 1984; Fisher 1977; Ray and Freeman 1978; Ray 1974; Crosby 1988; Brenner 1988). Scholars have developed new methods to discuss and evaluate contact situations, including models based on dependency (White 1983), market orientation or economics (Rotstein 1970, 1972; Ray and Freeman 1978), and conversion to Christianity (Grant 1984; Axtell 1985; Morrison 1984; Trigger 1987; Campeau 1987), to name but a few.

Review of recent adaptation-oriented studies suggest that scholars tend to focus on singular causes for contact change, and all too often stress the net result of contact, not the flow of information, in the processing of problems, goals, choices, decisions, and consequences that lead up to the net result (Campeau 1987; Martin 1978). Simply stated, they do not address culture change as a process, but as a result. These studies fall into two basic categories: (1) 'negative' studies where the end result is cultural



disintegration and (2) 'positive' studies where the end result is viability and adaptiveness by the native group.

Many of the studies are oriented towards material culture, some simplistically using the number of European trade goods present in archaeological assemblages to conclude that there were changes, but not questioning the rate, degree, rationality, or direction of the effects of change. Some studies are particularistic, lacking a theoretical framework for applicability to cross cultural comparison or evaluation (Yerbury 1986; Bradley 1987). They emphasize singular, one-directional causes for change, such as conversion to Christianity, resulting in loss of traditional ideology, thus suggesting a direct lead to cultural disintegration.

A few factors thought to stimulate culture change include: (1) reaction to disease, (2) population decimation due to warfare, (3) loss of traditional subsistence base, (4) reliance on European technology/ material culture, (5) economic dependence or a market orientation, (6) religious conversion and subsequent loss of traditional ideological subsystem, and (7) the changing cultural identities of an individual or group. These are the products of the culture contact and should not be offered as the processes that regulate that sequence (McNeill 1976; Brenner 1988; Anderson 1984). As Watson et al. have noted, these kinds of explanations are only events, "and even if verified ...

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would not serve as an explanation of the process" (emphasis mine, 1971:79).

Barger (1977:491) concludes that any association between change in culture contact and adjustment is case specific, rather than a universal phenomenon. For instance, Blanchard (1982:78) points out that Axtell's (1981) treatment of natives of the northeast as a homogeneous cultural group fails to detect subtle, yet decisive differences. Therefore, change or accommodation is dependent upon the circumstances of the context in which the change takes place. This underscores the necessity for a model within which to consider the processes of change. This is a significant consideration when developing a model which will be useful and instructive at a specific test case level, but also applicable cross-culturally. A model which is specifically tailored to a culture group (Bradley 1987; Yerbury 1986) has little validity as a research tool because other groups cannot be applied for comparison and contrast.

With these fundamental criticisms of culture contact studies in mind, a model of culture contact needs to be developed, based on the types and contexts for adaptive decisions made by indigenous populations, where ethnohistoric documents and archaeological collections provide the data base. Utilizing archaeological and ethnohistorical data together strengthens the overall data base and can be used not only to support one another, but

also to isolate inherent biases and weaknesses in either data set.

The model of decision-making in a contact context will be formulated on several fundamental principles of adaptation (Kirch 1982). Initially, a cultural group is faced with an external stimulus, e.g., contact by the French, which will result in problems or issues to be addressed (Ellen 1971; Fisher 1980). Feedback or information flow will ensue, within particular cultural variables with specific effects on the variable and overall system. Reactions and choices will have to be made to solve the problem and these may be rational or irrational (Heath 1976). When faced with a set of choices, decisions can be made at two levels: (1) individual and (2) group (Heath 1976). The decisions will be goal-oriented towards solving the problem and theoretically, structured within societal norms or constraints (Hopkins 1964).

Since the data for this study does not lend itself to consistent analysis of individual decisions, group level decisions will be addressed. Group level decisions occur when a number of individuals are faced with the same problem, resulting in the necessity of a group-wide solution (Kowitz and Knutson 1980). For example, individual Huron were faced with the opportunity to interact with the French for trading purposes. Individuals could choose to interact with the foreign group, but this would manifest itself at the group level, because the group would have to sanction

such behavior since ramifications of this interaction would be directed towards the group. Solutions can occur by consensus, coercion, or cooperation, and will evaluate risks, group security, and maintenance of the unit's identity or bounds of permissible change (Williams 1977; Wharton 1971).

Within the group, decisions can initially be made by subgroups organized by sex (female councils) or age (council of elders). These are important subgroups within culture, and their role in decision-making will be discussed. Often, members of these subunits are the ones who curate information and transmit it across generations through story telling. The net result of the decision-making process should yield solutions to the problem (Hoffman 1979).

The meaning of culture change and ensuing affects on the culture system will also be addressed. If the attainment of a new goal (e.g., change) brings improved benefits, the new behavior may be undertaken because it constitutes the least costly way to realize the goal, thus leading to change, but within the range to permit the continued existence of the cultural system. The processes of decisions, to attain new goals or to reaffirm old goals, will be presented in this study.

An assumption of this study is that European technology and markets threatened the viability of traditional Native American subsistence, economics, egalitarianism, etc. The processes of Native American choices and decisions to

maintain, preserve, or alter essential systemic variables will be assessed, particularly the role that choices pertaining to material culture played in contact interactions.

### III. Data Base: The Tionontate Huron of the Great Lakes

Precontact and historic period archaeological and ethnohistorical data concerning the Tionontate Huron of the Upper Great Lakes will provide the case study to test and evaluate the model of decision-making. The 'Huron', as a culture group, possess the traits which characterize a complex egalitarian society. Prior to European contact, the Huron and their ancestors occupied southern Ontario, migrating throughout this territory, with centuries of cultural group fission and fusion postulated on archaeological evidence (cf. Finlayson 1985; Wright 1966). It is appropriate to use the Huron as a case study because they possess the necessary culture group criteria and they are known to have come in contact with Europeans. Archaeological data provides the opportunity to consider the Huron culture system before contact, in an effort to provide a "baseline" and long temporal profile for change. An historical narrative format will be used for presentation of data in this study, since the data lends itself to a more qualitative than quantitative approach. An historical overview of the Huron is presented to place this group in temporal and spatial perspective for future discussion.

Trigger (1984, 1987) states that the Huron were not in a state of 'cultural equilibrium' prior to European contact, and this has been supported with archaeological evidence (Trigger 1985; Finlayson 1985). Gradual change has been documented in the archaeological record in a variety of prehistoric Huron sociocultural aspects, such as settlement pattern, mortuary practices, and ceramic motifs (Wright 1966; Warrick 1984).

With the arrival of Europeans in the early 1600s, direct contact is thought to have immediately brought about substantial and drastic change to the Huron sociocultural system (Trigger 1987). Historic records indicate that the Huron underwent population decimation in the 1630s from disease (Heidenreich 1971) and further reduction in number in the 1640s and subsequent displacement from their homeland in Ontario at the hands of the Five Nations Iroquois, primarily in a battle over fur trade territories (Jennings 1984). The influx of European trade goods brought about a supposed dependence for these wares by Native American groups, and missionaries reportedly caused massive renunciation of traditional ideological beliefs, resulting in cultural disintegration and acculturation.

By 1649-1650 the Huron and Petun survivors of the Five Nations' attacks and European diseases either coalesced for safety on Christian Island in Lake Huron or were adopted by one of the Five Nations tribes (Trigger 1987). Finding Christian Island an undefendable location, this group,

comprised of perhaps 500 Huron and Tionontate, fled through the Straits of Mackinac to Rock Island in Wisconsin. They stayed for nearly two years (Mason 1974, 1986), leaving in 1653 for the Mississippi River Valley/Black River area (Blair 1911 (1):157-189). Their whereabouts are not well documented until 1665 when their presence is noted at the Mission of Esprit at Chequamegon (Tooker 1978:398-399). By 1669, pressure from the Sioux forced the Tionontate Huron groups to take flight again. The Tionontate Huron fled to the Straits of Mackinac, followed by a French Jesuit priest who established a mission at St. Ignace in 1671.

By 1704, most of the St. Ignace Tionontate Huron and Ottawa had moved to Detroit, to settle near the newly founded Fort Pontchartrain. None of the Detroit area sites from the eighteenth century are known archaeologically, although village plans (cf. Tooker 1978), detailed census and linguistic data (Potier 1920), and documents (Margry 1876) exist.

By the late 1740s, the Huron divided into two groups, with one faction remaining in the Windsor area and the other moving to Sanduskey Bay region of northern Ohio (Clifton 1983; Campeau 1987). The latter group was eventually removed to Kansas in the 1840s-1850s, and later to Oklahoma at the turn of the twentieth century. Much of the documentation from the nineteenth century is found in translations of mythology and social/political structure (Schorer 1986; Barbeau 1915a, 1915b, 1917; Clarke 1870;



Connelley 1899; Finley 1840; Hanna 1911; Morgan 1901; Powell 1881; Schoolcraft 1851-1857).

The majority of the anthropological and historical analyses of the Huron stop abruptly at 1650, a date used by all too many scholars as the terminus of the Huron as a viable socio-cultural group. These treatises categorically state that the demise of the Huron was complete and irrevocable, and most even bracket the dates of study in the title as '1615-1650', as if the Huron were not 'real' before Champlain's alliance or 'real' after the Iroquois-induced diaspora (Heidenreich 1971; Tooker 1967; Trigger 1987).

The '1650' time marker has been used as a convenient date to end these studies for several reasons. In particular, if scholars concur that the Huron were thoroughly decimated by warfare and disease by 1650 and thus no longer actively participating in the fur trade, no discussion of this group is warranted post-1650. Also, there is a bias in the quantity and quality of historical documents and archaeological sites from the 1615-1650 period, versus the scant post-1650 data. Nevertheless, perusal of the historic record and excavations at the 1671-1705 Huron village at St. Ignace, in concert with volumes containing oral historical accounts, can be used to recreate the viable economic, social, and political role which the Huron continued to play post-1650 through the Detroit era.

Ethnohistorical documentation pertinent to the study consists of three components: (1) ethnographic surveys on

native populations, specifically the Tionontate Huron, synthesizing primary ethnohistoric literature as well as first hand accounts (Clarke 1870; Connelley 1899; Morgan 1901; Barbeau 1915a, 1915b, 1917; Tooker 1964, 1978; Trigger 1969, 1984, 1987; Heidenreich 1967, 1971, 1978; Culin 1975; Garrad and Heidenreich 1978; Morrissonneau 1978), (2) primary documentation from missionaries in the seventeenth and eighteenth centuries (Shea 1880, 1903; Blair 1911-1912; Wrong 1939; Thwaites 1903, 1959), and (3) primary sources of documentation from French military officers, traders and explorers, including records of trade transactions (Margry 1876; Cadillac Papers in Michigan Pioneer and Historical Collections [MPHC] 1903-1904; Hanna 1911; Kellog 1917; Quaife 1962; Thwaites 1902, 1905; Biggar 1936; Shea 1962; Kinietz 1965; trade records - Quimby 1966 [Hennepin]).

Archaeological reports dealing with precontact and predispersal Huron/Petun (and Neutral) sites are numerous and citations are not exhausted here (Johnson 1980; Donaldson 1962; Williamson 1983; Wintemberg 1936; Trigger 1987; Garrad 1977; Finlayson 1985; Latta 1983, 1985; Fitzgerald 1982; Wright 1966). The sites of Sainte Marie II (Trigger 1987; Finlayson 1990, personal communication), Plater-Martin and Plater-Fleming are reportedly the last sites occupied in Huronia and Petunia before the 1649-1650 Iroquois Wars and subsequent diaspora (Garrad 1977, 1989; Pearce 1989).

Several studies discuss Ontario Iroquois settlement patterns, including intra- and inter-longhouse configurations, cabin structures, and longhouse wall trenches (Kapches 1979, 1980, 1984, 1990; Wright 1981; Lennox 1981, 1984; Warrick 1984; Dodd 1984). These studies will be useful for comparison of precontact, predispersal, and post-dispersal sites.

Post-dispersal Petun/Huron sites located to date include Rock Island (Mason 1974, 1986)<sup>9</sup> and the Marquette Mission-Tionontate Huron village site (Stone 1972; Fitting 1976b, 1980; Branstner 1984, 1985, 1986, 1987, 1989). Three aboriginal burial grounds in the Straits area provide important comparative assemblages: Lasanen (Cleland 1971); Gros Cap (Nern and Cleland 1974); Richardson (Greenman 1958).

As decision-making processes are organized and carried out differently, based on the manner of social organization and context, the delineation of concepts has been undertaken to avoid the pitfalls of implicitly defined terms. Likewise, future studies can assess whether the data set is appropriate, considering the aforementioned concepts. The next chapter will build from these basic concepts, utilizing them to delineate the parameters of the general systems methodology.

## Endnotes - Chapter 1:

<sup>1</sup> The concept of system, and its related 'openness' will be discussed in depth in Chapter 2. For now, let it suffice to conceptualize 'system' as an "entity which behaves as an entity because of the interdependence of its component parts" (Fisher 1980:19), whereas an open system's input and output of energy, matter, and information operates between culture and environment.

<sup>2</sup> This is not to imply that 'cultural group' is necessarily synonymous to 'cultural group', but they are presented in such general concepts that they will be used interchangeably in this study.

<sup>3</sup> Terms such as 'band' and 'tribe' have become very value-laden in anthropological literature and subsequently the subject of much debate over their usefulness. It is for this very reason that these terms will be avoided and the general anthropological concepts characterized, since it is not the purpose of this study to define a band or tribe.

<sup>4</sup> There is an important aspect of the concept 'tribe' which merits mention, in part due to the vast amount of energy expended by scholars in this topic. The evolution of social organizations has occupied anthropologists for decades - which came first the band or the tribe? Do bands evolve into tribes, tribes into chiefdoms, etc.? If they do, under what process, stimuli, pressure? The origin of tribes is thought to have arisen due to mutual aggression, noninterference, defense, competition, conflict, in response to environmental unpredictability, in response to the flow of surplus goods and labor, and/or the domestication of plants and animals, to name but a few causal explanations (cf. Childe 1951:105-106; Radcliffe-Brown 1952:178-211; Middleton and Tait 1958; Gluckman 1965; Fried 1966, 1975; Service 1967, 1978; Helm 1968; Sahlins 1968:4-13; Carneiro 1970; Keesing and Keesing 1971:148-176; Dumond 1972; Adams 1975:222-228; Braun and Plog 1982:506; Saitta 1983:820-824).

<sup>5</sup> A simple egalitarian culture group in this case would be referred to as a band (Service 1978:1-6).

<sup>6</sup> The common ancestor is a distant figure and often a fictitious or a mythological creature (Fried 1966:8-9).

<sup>7</sup> These panresidential institutions are often called sodalities (Service 1967:20).

8 The exercise of power in the decision-making by a formally sanctioned authority (or authorities) is a structure found in chiefdom or state level forms of cultural integration. This form of rendering decisions, by power, influence, and sanctions and not through group consensus, results in a completely different form of decision-making processes. For a detailed discussion of power and influence in non-egalitarian groups, refer to Fisher (1980:189-227) and Tedeschi (1972).

9 The reliability of the Rock Island data will be discussed in Chapter 7.

CHAPTER 2:  
The General Systems Approach: A Methodology for Modeling  
Decision-Making Processes

I. Introductory Comments

This chapter will present the framework on which the model of decision-making processes will be constructed by outlining a methodology based on general systems theory (cf. Boulding 1956; Clarke 1978; Flannery 1968). This approach is believed to be best suited for this study because it allows the system to be divided into its constituent parts, the parts evaluated, and the system put back together again. The evaluation of the parts in isolation of one another allows for biases, weaknesses, or strengths of each to be isolated, and compared and contrasted within the system.

General systems theory will be put into an historical perspective, in terms of its origins, adaptation by anthropologists and archaeologists, and critics (Boulding 1956; Flannery 1968, 1986; Salmon 1977). The major components of general systems theory will be presented, and the appropriate approach for defining systems will be outlined. Finally, the composition of the subsystems will be offered, with parameters outlined which are considered relevant to the operation and maintenance of the overall system.

## II. Historical Perspective

General systems theory did not originate in anthropology, but has been adapted by social scientists from mathematical and physical sciences (cf. Bertalanffy 1950; Boulding 1956). There are many kinds of systems, spanning the sciences and dimensions of space, from solar systems to the system of a molecule. Noting general similarities in the operation of systems, Boulding (1956)<sup>1</sup> proposed a theoretical position for evaluating systems which he called 'general systems theory - the skeleton of science'. He devised this model because he noted that an "increasing need has been felt for a body of systematic theoretical constructs which will discuss the general relationships of the empirical world" (Boulding 1956:197). Boulding wanted this theory to be somewhere "between the specific that has no meaning and the general that has no content" (1956:197).

Ludwig von Bertalanffy (1950) and Boulding (1956) are generally accredited with developing general systems theory, and others rapidly refined the approach for their specific purposes (Rapoport 1953; Ashby 1956; Watt 1966; Buckley 1967). These studies assume that there are "systems so basic in nature that they can be seen operating in virtually every field" (Flannery 1967:122), hence the applicability of general systems theory to areas as diverse in content as physics, chemistry, biology, and anthropology.

Childe (1951) is one of the first social scientists to adapt a general systems approach to anthropological studies,

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particularly studies of cultural change. A cultural system, according to White (1959:8), is "a set of constant or cyclically repetitive articulations between the social, technological, and ideological extrasomatic, adaptive means available to a human population". Binford defined a cultural system in its simplest state when he wrote that culture is comprised of a set of interrelated parts (1962). White and Binford isolate three basic subsystems of a cultural system: ideology, sociology, and technology (Binford 1962; White 1959). This sets the scene for the adequacy of thinking of a culture as a system, made up of parts.

The study of the structure, processes, and behavior of these subsystems is considered to be vital to the understanding of the overall cultural system. White sees the technological component of a system as the basic part upon which the social and ideological subsystems depend. Therefore, the cultural system and its potentially changing social organization depends upon the status of the technological subsystem (Binford 1962).

This concept has been the building block for many archaeological studies of culture contact and change, since the change in the technological subsystem, manifested in archaeological contexts as the material culture assemblage, lends itself to quantification and thus, evaluation of change. Simply stated, a change in technology reflected in

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the material culture record has been used as an indication and predictor of culture change.

Brown's archaeological research utilizes a systems model for evaluating trajectories of culture change in a European-Native American contact context (1979). At a time when acculturation theory was still the main focus and format for studying contact and change, Brown's study was revolutionary in concept, design, and conclusions. Brown prevailed upon anthropologists to view cultures as systems that are to be "seen as continuously changing through time by the interaction of various elements of the system with the environment" (1979:225). Brown found causal linear models problematic in the analysis of cultural contact and change because "they do not adequately fit the observable complexity" (1979:225). This is precisely the problem inherent today in using acculturation theory as an explanatory tool for culture change and contact. Acculturation theory denies that change occurs in a cultural system before, during, and after contact, at various rates, directions, and for various reasons.

Using variables considered essential to the transformation processes of culture, Brown successfully modelled pathways of change, revealing significant combinations of variables. Brown's study concludes that there are multicausal variables inducing or stimulating change and a particular variable may or may not be essential to the process, depending on the specific circumstances of

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the culture context. The implications of this research were important for the move away from unicausal and unidirectional acculturation studies. Brown admits that the general systems model is just a start towards a more rigorous and accurate method for studying culture contact and change (1979:263). Unfortunately, little research has been undertaken in the interim to build from the general systems model, to understand and explain culture contact and change. This may be due in part to the fact that it is still easier to measure quantities to indicate or reflect change, than it is to measure qualities to indicate or reflect change. This study utilizes the basic components and underlying concepts of Brown's thesis as a methodology from which to build a model which looks at the processes that organize and implement Brown's essential variables.

Other archaeological studies have applied systems theory to address prehistoric change in response to environmental considerations (Durham 1981; Keene 1981; Smith 1981). These studies quantify the flow of matter and energy between the environment and culture system, but neglect the fact that these exchanges are coordinated by the flow of information (Flannery 1968, 1972:400). This is in part due to the nature of the available data: the flow of information is difficult to quantify, whereas the energy and matter input and output of a culture system-to-environment liaison can be measured numerically and manipulated statistically.

Flannery and Marcus have noted that most paleoarchaeology studies deal with matter and energy and have found the lack of attention to information flow to be "distressing because it is the information exchanges which regulate many of the matter-energy transactions" (1976:374). In addition, Moore (1981) states that many studies have been successful at modeling the manner in which cultural systems function through the flow of energy and matter, but have neglected the importance of information. "The ephemeral quality of information flows ... have limited their studies. Most theories have no explicit role for information sharing and processing as a variable" (Moore 1981:194).

Just as "systems theory is an especially powerful method with which to investigate process" (Watson et al. 1971:85), the flow of information through the various subsystems is an important component of the systems process with which to investigate decision-making processes. Information is an integral aspect of each phase of the decision-making process: groups (in terms of a set of individuals with a collective identity) collect, process, and store information, which is shared among members (beyond members' lifetimes) and used to make consensus-based decisions (Reynolds 1986:441). Therefore, the role information plays within various cultural subsystems is an essential aspect for the modeling of decision-making processes.

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For the consideration of cultural systems, the basic tenets of general systems theory have been borrowed and refined by anthropologists to address issues of cultural adaptation. The organization of studies around the principles of systems theory has allowed for systematic and rigorous testing of hypotheses concerning culture change and continuity. Based on substantive comments about whether general systems theory is really theory<sup>2</sup> (Salmon 1978), this concept will be referred to in this study as 'general systems approach'. It is felt that in this case, the term 'systems theory' more adequately reflects a model or method for studying systems, and does not necessarily contain the requisite hypotheses, postulates, and laws to constitute a true theory<sup>3</sup>. Therefore, in this study, the concept of 'general systems' is to be used as a method or approach for discussing decision-making processes.

### III. Outline of General Systems Approach

The basic principle of the general system approach is to classify systems according to how their parts are arranged and communicate. From this, laws or general patterns of system behavior are sought. The concept of 'system' can be characterized as "a whole which functions as a whole by virtue of the interdependence of its parts" (Rapoport 1968:xvii) or as "a set of objects together with relationships between the objects and between their attributes" (Hall and Fagen 1956:18). Buckley defines "system" as "a continuous boundary-maintaining, variously



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related assembly of parts ... not to be confused with the structure or organization its components may take on at any particular time" (1967:5). Clarke adds that systems are comprised of a network of intercommunicating attributes, where the change in one part may result in the change of another or the system (1978:42-43). Therefore, culture can be analyzed as a system, investigating the interacting elements and relations between elements, particularly the flow of information and feedback (Kirch 1982:108). A culture system is therefore an information system (Clarke 1978:86), and the processing of information is integral to decision-making.

It is assumed here that a culture system is an open system, where the interplay of energy and information with the environment is considered to be essential<sup>4</sup>. Systems and their parts can be in a state of stable or unstable (dynamic) equilibrium, but culture (or open systems) are generally in a state of unstable equilibrium where a "small perturbation or displacement can lead to a great change in the state of the system" (Watson et al. 1971:72). Homeostasis is the process by which open systems maintain their fundamental structure within certain boundaries, in the face of stimuli for change.

The study of systems operation relies on the trajectory of feedback, specifically positive and negative feedback (Maruyama 1963). Negative feedback within interrelated systems parts functions to maintain stability, but within

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certain bounds (self-regulating and equilibrating operations, as in a thermostat). Positive feedback, or deviation-amplification, characterizes many cultural systems. Positive feedback induces deviation, but "the system must select and preserve through some form of positive feedback the aspects of this deviation which are favorable to the systemic structure" (Watson et al. 1971:75; cf. Buckley 1967:495). Not all change is deleterious or 'bad' for the system. This is directly related to the interacting, goal-seeking, decision-making processes of a cultural group (Tilley 1981:363-369). The system learns to manage feedback, leading to the development of new negative feedback patterns and strengthening of old negative feedback. This in turn allows for progress and change to occur at a manageable rate and direction (Fisher 1980:110-114). Nevertheless, group decision-making processes involve both negative and positive feedback.

The study of a system consists of much more than merely isolating its constituent parts. Not all variables are even relevant at one time to the particular system under study, nor will all variables be available or observable for study. The homeostatic mechanisms that operate to maintain the stability in a system part must be isolated. If these mechanisms fail, change can occur; thus, through their explication, the cause for change may be explained as well.

Decision-making processes occur as these homeostatic mechanisms.

Buckley states that

persistence or continuity of an adaptive system may require, as a necessary condition, change in its structure, the degree of change being a complex function of the internal state of the system, the state of its relevant environment, and the nature of the interchange between the two [1967:493].

This is related to the flow of information and the system's ability to process and store information.

#### IV. Variables for the Study of Decision-Making

There can be many or few variables that comprise a system, depending on the subject matter. Clarke (1978:101) stresses the importance of realizing the arbitrariness of defining cultural system variables, because "Not only are the subsystems really different aspects of the same system but even could we define them adequately in terms of content and boundaries one would still not have defined the system containing them". The important task is to isolate the variables which are relevant to the frame of reference under study, and elucidate from the variables the information they are capable of encoding about the system.

It is worthy of mention that this is an attempt to analyze a "complex and incompletely observable ... [set of] subsystems [which] are never fully available for inspection" (Clarke 1978:58). Several assumptions have been made about the processes of cultural systems and explication of subsystems, including the very nature of their arbitrariness. The assumption has been made that cultural

systems are integral whole units comprised of interrelated and intercommunicating subsystems or parts. It is also assumed that systems are best understood in terms of their structure, parts, processes, and behavior. Therefore, the basic operational parameters of the relevant subsystems will be presented.

As previously noted, there is a general consensus between anthropologists that there are three primary subsystems which comprise a cultural system: technology, ideology, and sociology<sup>5</sup>. Each of these components will be divided into a more detailed outline of the variables that incorporate the basic attributes of cultural system: beliefs, activities, artifacts, and the information network that controls and regulates these manifestations of a cultural tradition. A brief statement of subsystem composition will be outlined before the discussion of the detailed arrangement of each variable and how they interconnect and intercommunicate.

The subsystem of technology encompasses material culture, which is predominantly reflected in the archaeological record, but with inherent biases towards selection and preservation. The material culture assemblage is an information subsystem, encoding data about problems, choices, and decisions of selection and preference. Within this subsystem, economic considerations must be taken into account, including the rules which govern the subsistence

strategies, such as extraction and processing of resources to provision the group and trade<sup>6</sup>.

The social subsystem is viewed as the "hierarchical network of inferred personal relationships, including kinship and rank status" (Clarke 1978:102). Social rules concerning kinship and rank are concepts held in common by a group which exist "only in human consciousness, ... as an arbitrary system of ideas, not spontaneous development of a factual situation" (Levi-Strauss 1945:42). This subsystem can encompass group rules on marriage, descent, residence patterns, obligations, rules of reciprocity, and life cycle.

The ideological subsystem is comprised of the beliefs and rules that structure the 'supernatural' which are "expressed in a body of doctrine and a sequence of rituals which together interpret the environment to the society in terms of its own percepta" (Clarke 1978:110).

#### A. Ideological Subsystem

The ideological subsystem cannot be easily separated for study from the other components of a cultural system. Primarily, this is because the underlying assumption of Native American cosmology is that human life is essentially continuous with the rest of nature, involving nearly every aspect of daily life, whether hunting, preparation of food, dreams, life cycle events, or basic social relationships, as well as animate and inanimate objects (Grant 1984:18-19). Feasts and ceremonies were held to cement kinship relations and ties between villages. Dreams or visions were part of

hunting, friendships, naming ceremonies, illnesses and cures. These elements of ideology were intertwined with the role of the shaman or medicine man, animism, spirits, souls, and the afterlife, and all parts of the system must be in balance if the whole is to cohere (Grant 1984:18). This certainly underscores the arbitrary nature of creating subsystems and classifying cultural units into categories.

The ideological subsystem consists of the stories, myths, rituals, feasts, dances, solidarity groups, pharmacology, specialists, games, and all ceremonies created by a group to express certain idealized rules for appropriate behavior. This subsystem encodes information which is processed through ceremonies and myths to maintain the overall system. Nevertheless, ideological principles can change, through

the cumulative encrustation and elaboration of the cycles of religious myths ... [in] the continuously moving equilibrium process of minimizing the maximum religious dislocation by the generation or acceptance of "new" doctrine adjusting the old and the new information [Clarke 1978:111].

The abandonment of one set of goals and substitution of a new set may be in an effort to sustain certain integral systemic goals. Rappaport (1971) observes that ideational systems are analogous to the memories of automatic control devices. This system encodes a set of "reference values that trigger homeostatic responses when internally or externally induced perturbations threaten to change the values of critical variables beyond predetermined limits" (Redman 1971:39). Although some scholars believe technology



is the warp that weaves together cultural systems, the information encoded in the ideological subsystem, particularly sets of rules and beliefs and the system of transmitting this cultural information, is also of paramount importance to linking together the components of the cultural system (Brenner 1988:157). It is perhaps best to caution that no one subsystem should be given weight over another in regards to sustaining or organizing the cultural system.

McNeill (1976) and Martin (1978) conclude that population decimation due to European disease in the early contact period resulted in loss of faith in traditional religions, resulting in conversion to Christianity. Snow and Lanphear (1988), however, suggest that no major epidemics occurred in the sixteenth century and caution researchers to assess the time and magnitude of epidemics before using them as the catalyst for change. Events are being used as the agent for change without adequate delineation of the processes.

There has been much scholarly debate about the impact of missionaries on traditional native religion. Some authors think that Jesuit influence on native religion was overwhelming and devastating within a few years of contact (Martin 1978; Morrison 1984; Axtell 1985; Campeau 1987). Certainly the Jesuit and Recollet accounts of baptizing entire villages lend credibility to this viewpoint. Others caution that we must consider the reliability of these

accounts, as well as motives behind native conversions, which may have been for economic reasons (Christian Indians received higher prices for furs), materialism, protection, or access to guns (Riches 1982; Trigger 1987).

Firth documents the affirmation of cultural values in mortuary rites (1955), and Gross (1979), Blanchard (1982), Robinson et al. (1985), and Crosby (1988) see a persistence of native religion in spite of contact. They allow for the incorporation of Christian elements into native cosmology, and do not concede that Christianity supplanted traditional ideology until extensive and prolonged direct contact.

Blackman argues that acculturation can be a creative process, citing evidence for innovation and the "meaningful incorporation of alien materials and ideas into traditional conceptual orders in art, architecture, and ceremonial complex" (1976:409).

Crosby's analysis of the role native cosmology and ideology played in the acceptance of European religious ideas and material culture indicates that Native Americans accepted outside ideas, but on their own terms (1988:202). Concerning the elusive topic of ideology in archaeological studies, Hodder (1986:31) states that "Systems theory provides a method for bringing the social and ideational into the domain of feasible study, because systematic links between the material world and these less visible aspects of life [can] be predicted" (cf. Renfrew 1983; Binford 1971; Johnson 1982; Drennan 1982).

According to Riches (1982:201-204), Native Americans were capable of incorporating and explaining disasters within their individual societies. The usual explanation that epidemics were brought by vengeful spirits and that missionaries were more successful as medicine men than their own are not causes of conversion, but should be considered means used to justify the incorporation of new ideas and goals and allow for the abandonment of old goals (Riches 1982:204). Often, Jesuits allowed groups, such as the Huron, to incorporate native elements into Christian services, and priests may have been viewed as shamans, but possessing more power (Grant 1984:38-42). The missionaries' power or authority is thought, by some scholars, to have been the charismatic influence that allowed native groups to legitimate Christianity (Conkling 1974:2).

Grant (1984:22-24) outlines similarities and differences between 'traditional' Native American and European religious practices. For example, the main Algonquian spirit, kitchi-manido, needed little adaptation to be transformed into the Christian God. Native spirits who had the capability of manifesting themselves on earth in human form could be held analogous to the Christian figure of Jesus Christ, as a similar "mediator between God and man" (Grant 1984:23). Nevertheless, there are fundamental differences between native and Christian religious expectations, particularly expectations of performance and concepts such as 'sin', 'repentance', and 'faith',

Grant also outlines possible explanations for native groups' resistance to conversion, as well as the degrees or kinds of conversion possible. The kinds of change that resulted from contact with European missionaries could include supplementing the traditional religions with aspects of Christianity or the recognition of the superiority of Christianity and disillusion with traditionalism. Grant believes a third manner of conversion was possible, stating it is "conceivable that for many or perhaps even for most Indians the profession of Christianity was a subtle but effective way of rejecting it" (1984:250). He cites the conveyance of this attitude by a Huron to Father Dablon: "You must know that we have a 'yes' that means 'no'" (Grant 1984:250). Perhaps native groups included aspects of Christianity into their traditional practices in order to make their behavior more acceptable to missionaries.

Other scholars have emphasized aspects of the ideological subsystems which pertain to power. Native groups are thought to have organized the presence of Europeans into their world as returned deities, bringing with them powerful goods (Bradley 1986:106-110; Hammel 1983; Miller and Hammel 1986). These goods are thought to be analogous to traditional items, but potentially more powerful and certainly available in larger quantities: glass beads replaced crystal, majolica sherds for shell pendants, and European copper for North American copper. Thus, these studies suggest that initial trade was structured through

metaphors, but the metaphors were rendered useless when the ideology disintegrated (Sahlins 1981; Miller and Hamell 1986). The model of decision-making will provide the means for addressing native conversion to Christianity and the processes of subscribing to new religious values.

The interpretation of ideology from the archaeological record is difficult at best. From observations recorded in ethnohistorical documents, vague reflections of ideology may be gleaned from material culture evidence. Attempts at assessing the stasis of native mortuary practices through contact have yielded mixed results. The creation of status positions and, hence power as reflected in grave good assemblages, have been interpreted in various ways (cf. Robertson 1982; Mainfort 1979, 1985). Brenner (1988) suggests that the influx of European trade goods into native mortuary assemblages indicates the creation of status or 'big man' roles, which had to be symbolized, particularly through the symbolism of numerous status items in grave lots. Materials were placed in grave lots to signify power, because it was achieved, not ascribed (Brenner 1988:152). The flow of information regarding the problems, goals, choices, solutions, and decisions which instigated the incorporation of foreign ideological principles will be explored in subsequent chapters.

#### B. Technological Subsystem

According to Clarke, the technology of a culture group is comprised basically of the material culture assemblage,

which "constitutes an information subsystem of patterned constellations of artefacts which outline the behaviour patterns of a sociocultural system and embody that system's technology" (1978:129). Accordingly, social and ideological subsystems are functions of their technological bases and as technology varies, so will the other subsystems. Mesthene perceives technology to be the organization of knowledge for the achievement of practical purposes, and observes that technological change induces social change by creating new opportunities and generating new problems (1970:25-26). He goes on to suggest that technological change, as manifested in a new tool, for example, generally creates a new opportunity "either to do something differently or better than before, or to do something for the first time that simply was not possible at all before," which results in social change (1970:28). Neither of these positions necessarily allow for decision-making responses to problems, but expound a virtual 'technological determinism' for culture change.

Clarke, on the other hand, views the role of technology as the "... oscillating equilibrium between the artefact subsystem and other subsystems [which] occurs as induced feedback 'response' to fluctuations in the religious, psychological, social and economic subsystems" (1978:130). These oscillations, according to Clarke, may represent 'scanning and searching' for advantageous variety. Choices for stasis or change in technology or material culture can

be understood in terms of the implications for procurement reliability and efficiency, as well as the information channeled to transmit choices. Therefore, the material culture assemblage can reflect choices made as solutions to problems, based on a set of goals specific to each context. The technological subsystem is intimately linked with the rest of the cultural subsystems by way of the processes of decisions made to directly affect those subsystems. Likewise, a choice to change material culture goods does not necessarily require a choice to change the operation of the technological subsystem. This point is in direct conflict with numerous studies on European contact, dependence on trade goods, and acculturation. The study of decision-making processes will provide the opportunity to evaluate the dilemma of the role technological change plays in cultural equilibrium and change.

The technological subsystem also incorporates the economy of a culture system, including the pattern, strategy and rationale for the extraction of subsistence resources. Other factors to be included are the resources utilized based on the set of information about time and energy scheduling, seasonal mobility and environmental constraints, population aggregations vis-a-vis resource types and yields, trade relationships for nonlocal resources, preference and selection, taboos, and the ensuing strategy developed.

The resource base must not be over-exploited according to economic rules and this may be manifested through

technological innovations for hunting, trapping or fishing, or ideological taboos controlling harvests. Likewise, economic strategies may be reflected in the material record of archaeological sites, particularly the methods for extraction of subsistence resources and the subsistence means themselves.

The flow and storage of information within the system regulates the economy in terms of scheduling, availability of resources, and so on (Moore 1981:194-217). Therefore, if economics are viewed as the set of rules, based on information feedback (and retention) within the system and from the environment, for resource exploitation, then the rules must provide operating parameters to organize:

- (1) which resources to exploit, (2) when and in what manner to exploit resources, (3) division of time and labor, (4) resource scheduling in time and space (seasonal movement across the landscape), (5) regulation of resources, by group or individual, and manner of leadership (coercion, cooperation, control), (6) the role of ideology and preference taboos pertaining to choice of resources, as well as preparation and disposal patterns, and (7) decisions about the future in terms of risk aversion. The latter aspect is often perceived as minimization of risk, by processing potential problems through the choice of the least risky alternative. This may or may not be the most rational choice, and may not maximize returns, but is most likely to insure security. For example, one can look at the



processes the Huron underwent in deciding to retain surplus seed to insure several years of crops, in case of crop failure the following year.

Concurrent with the arrival of European exploration and settlement of eastern North America came the onslaught of European goods offered in trade to the Native American groups for their food stuffs and animal pelts. The influx of European manufactures are often thought to have caused immediate dislocation in many Native American institutions, particularly technology, ideology, and social relations. Seeking unicausal explanations, and not processes, these studies conclude that the desire by Native American groups to obtain trade goods either: (1) affected the native groups' ability to procure foods and subsistence pattern, rendering them reliant on trade posts for provisions (Bishop and Ray 1976; Heidenreich and Ray 1976; Brasser 1978; Mason 1983), (2) affected ideological beliefs by replacing traditional items with European and in larger quantities, changing status roles (Martin 1975; Hammel 1983; Miller and Hammel 1986), (3) disrupted social order and kin ties by establishing the desire for wealth (Brenner 1988), (4) altered the material culture and technological capabilities, resulting in total dependence on trade items (Yerbury 1986), or (5) mercantilistic or materialistic attitudes are thought to have replaced centuries-old egalitarian rules (Steward and Murphy 1956:153; Yerbury 1986:17; Bradley 1987:89). Once this vicious cycle was set in motion, there was

supposedly no turning back, suggesting a passiveness on the part of the Native American participants, with cultural disintegration and acculturation the eventual and swift outcome.

The accessibility and availability of trade goods is supposed to have brought about new positions in status, changing from achieved roles to ascribed as reflected in the archaeological record by status items in grave lots on mortuary sites (Mainfort 1979, 1985; Martin and Mainfort 1985; Brenner 1988). Robertson (1982), however, interprets the pattern of grave goods in the archaeological context of mortuary sites, such as the Fletcher site, Bay County, Michigan, to represent the achievement of status based on age, concluding that "the young adults in the population were taking advantage of the flexibility built into egalitarian socio-political systems which responded to the fur trade by increasing the pool of valued positions of authority, prestige, and influence" (1982:22).

An interesting, if not predictably bizarre, line of reasoning for technology and culture change has been offered by Calvin Martin (1975) entitled "The Four Lives of a Micmac Copper Pot." Martin indicates that the influx of "a few, seemingly innocuous" copper pots alone were enough to disrupt every aspect of Native American lifeways, and "eventually castrated the native subsistence economy," ideological practices, settlement and seasonal pattern, and technology (1975:111-116). Although basically economic in

explanation, Martin goes on to state that before contact native groups were participating in

a non-profit, balanced, reciprocal exchange of necessities and luxuries ... [which] was completely overhauled in historic times into a highly competitive, individualistic, profit-oriented enterprise ... reducing numerous heads of families to debt peonage [Martin 1975:111-112].

This study, while presenting a thorough profile of Micmac food preparation practices, is wrought with over-generalizations and gross assumptions about change which are simply not supported by ethnohistoric documents. As Martin (1978) has done in other works (cf. Krech 1981, 1984; Riches 1982:202-204), data is actually presented in his own argument that does not support the hypothesis; in this case that the presence of copper pots induced ceremonial change (Martin 1975:114-115).

Upton (1979:xi) concludes that Micmac survivors of European-introduced diseases actually lived better due to European tools which were more efficient, and thus, knowledge of manufacturing techniques and traditional tools were rapidly lost. He offers no discussion of the processes formulated to select European over traditional goods, but concludes that these were chosen because they were "better". Trigger's study of the pre-dispersal Huron suggests there was a technological impetus for culture change and he states that

By the beginning of the seventeenth century the superiority of European axes, knives, and other cutting tools over their native counterparts was universally recognized ... By the 1630s the Hurons explicitly recognized their dependence on French goods and that this dependence constrained their freedom ... [1987:xxvi].

Yerbury (1986:17) states that the "Athapaskan established new mercantilistic impulses and socio-economic relationships through the fur trade, and the impact of European trade goods on these people was significant enough to induce cultural change long before Europeans visited them in their own territories".

Several scholars of culture contact studies, mentioned below, have sought economic explanations for culture change and acculturation. The discussion of economics in most studies generally revolves around an evaluation of the changing role of trade relationships with the arrival of Europeans. A variety of types of trade are utilized to structure models of change, where participants partake in either: trade negotiations for status or profit motives, 'gift trade', which links partners in relationships of reciprocity; administered or 'treaty trade,' where trade is organized through governmental channels; or market-oriented trade, where the range of commodities is unlimited and participation follows rules of supply and demand as the pricing mechanism (Polanyi 1975:136-149).

Economic motivation on the part of the native groups, and the desire to form political alliances with Europeans, are thought to have brought about drastic cultural

disintegration as native groups moved towards a market economy (cf. Hunt 1940; Ray 1974; Bishop and Ray 1976; Heidenreich and Ray 1976; White 1983; Yerbury 1986). Townsend (1970a, 1970b, 1973) and Krech (1976, 1978, 1981, 1984) allow for major changes in the economic/political policies of native groups, but view these changes as adaptations that account for cultural persistence.

Heidenreich (1986), Eccles (1983), and Jennings (1984) reject economic motives as the causal factor behind culture adaptation, and suggest that indigenous populations were involved in trade relations and political alliances to regain group members lost to disease and warfare. Eccles (1983) maintains that native groups were economically independent and impervious to European influences until 1760. Ray and Freeman (1978) assess the motivations behind Native American participation in market economies, and subsequent dependence, but in isolation of the processual operation of most other culture system factors.

Another method for addressing contact is a market Orientation, where change leads to dependency (or dependency theory), where "peripheral regions are incorporated into the global capitalistic system and [subsequent] 'structural distortions' (socio-econo-politico) result in these societies" (White 1983).

Thomas (1985:131-161) has developed a model of Patron/broker-client relationship that supposedly developed with trade amongst Europeans and native populations on the

southern New England frontier. He views the initial contact trade as a 'social binder' between families, native groups, and Europeans, where information was dispersed with trade negotiations and transactions (Thomas 1985:144). Likewise, he finds that too few goods were traded per person throughout the 1660s (in non-coastal areas) to indicate a dependency on trade wares. Nevertheless, Thomas concludes that individual motives for 'self-aggrandizement' molded processes of change which affected the whole group (1985:157).

Gillispie (1976) and Smith (1975, 1976, 1978) have found a continuity in Native American economic patterns despite contact with Europeans. Heidenreich (1986) and Jennings (1984) reject economic motivations as the causal factor behind acculturation and suggest that indigenous populations were involved in trade relations and political alliances to regain group members lost to disease and warfare. During the initial contact period, the economic motivation for trade participation by native groups is denied by Ritchie (1954), Witthoft (1966) and Trigger (1987) because the early trade was not in utilitarian goods. Eccles (1983) maintains that native groups were economically independent and impervious to European influences until 1760, though he is sharply criticized by Trigger (1987:xxv-xxvi) as an 'idealist historian' for maintaining that native groups did not at some point actively seek to participate in the European economic system.

A study of the economic persistence of Canadian Eskimos suggests that traditional economics were replaced with new ideas and institutions because new experiences were encountered (Graburn 1971). The old economic practices were flexible enough to allow for the incorporation of new activities, and did not result in drastically altered leadership roles or group obligations for subsistence. Graburn concludes that the "Eskimos must have felt that their material security was advanced by the larger amounts and greater range and quality of goods available at posts" (1971:119).

Ray and Freeman (1978) allow for native participation in the market system, but conclude that the native groups engaging in trade networks with the Hudson Bay Company (before 1763) operated within their own cultural criteria concerning preference, redistribution, and quantity. The trade system in which the native groups participated was embedded in their socio-politico-economic system, where the processes of economic decisions were organized through political leadership and group input, and structured through custom and tradition, rather than by property owners and entrepreneurs in pursuit of a profit. Trigger agrees that native groups sought to maximize returns in exchanges with other tribes and Europeans, "although the ways in which they negotiated the terms of trade differed from normal European forms of market exchange" (1987:xvi).

In studying the native groups of British Columbia, Fisher concludes that the Europeans and Native Americans organized a mutually beneficial economic system, where the "Indians [of British Columbia] met the maritime fur trade and moulded it to serve their own ends" (1977:23). The conditions of the early land-based trade "was sufficiently permissive for the Indians to exercise a large degree of choice about those aspects of European culture that they incorporated into their own" (Fisher 1977:47).

Rotstein (1970) views the economics of native trade networks with Europeans as an institutional extension of the traditional alliance system. He refers to this as administrative or 'treaty trade,' whereby exchange behavior is ruled by systemic elements such as kinship obligations, fictive kin roles, and ceremonial duties. Rotstein therefore concludes there is a subserviance of economic motivations to political objectives, because without the formal customary alliances, no trade could have taken place. Ray and Freeman do not agree with the treaty trade position (concerning the Hudson Bay area), because they have found no evidence to indicate that the English entered into formal alliances with native groups. Likewise, any given native group traded with both the French and British, and were therefore guided in their choice for goods by economic and not political motivations (Ray and Freeman 1978:232).

Bradley's assessment of the Onondaga economic system concludes that a drastic change occurred from egalitarian



exchange up to contact, when motivations for participation in the market-oriented trading system occurred (1987:89-103). Dependency theory, where "peripheral regions are incorporated into the global capitalistic system and [subsequent] 'structural distortions' (socio-econo-politico) result in these societies" relies on native participation and dependency on the European market system (White 1983). Yerbury (1986:17) states that "the Athapaskans established new mercantilistic impulses and socio-economic relationships through the fur trade", concluding that this new economic structure, as manifested in a desire and dependency on European trade goods and a consequent loss of traditional subsistence strategies, resulted in significant culture change (1986:160).

Brasser (1978) postulates a model of contact and change encompassing five general steps, which again entails an economic determinism explanation for adaptation. At initial contact the Native Americans are friendly, but suspicion and hostility are quickly provoked by European mistreatment. Epidemics and the influx of liquor ensue, with native groups' religious beliefs questioned, and the adoption of European technology leading to dependence. Finally, this economic dependence on trade goods results in the deterioration of traditional technology, and leads to poverty and malnutrition.

There are studies that discount the substantial role technological or material culture change is supposed to have

wrought on the traditional Native American lifestyle. The study of a Narragansett cemetery by Robinson et al. (1985:107-130) finds that European contact and the introduction of trade goods led to an intensification and persistence of traditional religious and mortuary practices, and "this mortuary behavior was an expression of group solidarity and cohesiveness against the cultural and biological pressures of the European invasion" (Robinson et al. 1985:109). The trade goods were mixed with traditional items and they conclude that "it is likely that some change occurred and it was through mortuary expression that these new social values were incorporated and rationalized" (Robinson et al. 1985:124). Considering the specific impact of the European invasion of trade goods into Native American assemblages, they found that the "technological explanations which suggest that Indian groups abandoned their traditional crafts and technologies in favor of European manufactures are supported by archaeological evidence" (Robinson et al. 1985:124), suggesting that native groups were not passive victims of European expansion and mercantilism, as often stated.

White views culture contact through dependency, not on trade goods, but through the process of incorporating indigenous groups into capitalistic systems and ensuing distortion of political, economic, and social systems (1983:xvi). White states that the "mere exchange of goods hardly represents dependence ... but the penetration of the

market economy ... which resulted in the destruction of native subsistence" (1983:204). This position is related to world systems modelling and capitalistic dominance offered by Wallerstein (1980).

### c. Sociological Subsystem

The explication of the social subsystem at the end of the subsystem discussion is intentional, because sociological aspects of a culture group overlap with and bind together all of the system components. This aspect of a cultural system is difficult to sort from the other subsystems, which again, underscores the arbitrary nature of dividing up and delineating specific traits of subsystem variables.

Within the sociology of a cultural system lies the rules and knowledge about the personal relationships of group members, kinship structure, rank, reciprocity, egalitarianism, status, marriage patterns, residence, "laws", leadership roles, and all the subconscious and conscious ideas (the information) about these social aspects. This information is commonly held between members of a group, and in theory, results in patterned actions or responses (Clarke 1978:104). "The social subsystem is an idiosyncratic and multipurpose network generated by a set of acquired ideas or information ... continuity is overwhelmingly advantageous in the maintenance of variety" (Clarke 1978:105). Social subsystem information expresses the range of commonly held and accepted rules for behavior,

as well as the range of tolerance for deviating from the commonly held behavioral rules.

The results of contact on the native social institutions are generally considered to have been thoroughly destructive. Often, changes in other subsystem variables have been suggested to result in the degeneration of the social makeup of a group. For example, change in subsistence practices supposedly brought on a change in multi-family households to nuclear family units, particularly in sub-Arctic and Arctic groups (Rogers 1963; Peterson 1973; Nooter 1976). The individualization of hunting, and thus provisioning, was supposedly not feasible in a multi-family situation. Riches sees the change in household composition as related to change in socialization practices due to change in symbolic meanings of types of food (1982:185-187). A change in social roles of leaders is also thought to have been derived from a change in the economic structure, ideological beliefs and practices, and technology, where material goods could be and were accumulated. This supposedly resulted in stratification and ascribed status positions (Mainfort 1979, 1985; Martin and Mainfort 1985; Brenner 1988:150).

Conkling (1974) believes that the change in native society was directly related to the control missionaries were capable of. He states that "... as their old way of life became less and less feasible, [it] involved the acceptance of new ideas of social organization ... they [the

Wabanaki] acceded to a more intense and compulsory outward regulation of theirs lives ..." (Conkling 1974:16). Thus, according to Conkling, a change in the religious practices of this native group, brought about by the charisma of missionaries, was the stimulus for the change in overall social order. The acquisition of trade goods is also thought to have brought about a desire for material accumulation and wealth, destroying traditional rules of egalitarianism and social cohesion.

Economic motivations are thought to have resulted in competition for resources such as beaver trapping territories or middleman positions (cf. Hunt 1940; Fenton 1971; Heidenreich 1971). Schlesier (1976:129-145) considers this interpretation to be in error and believes the Wars of the Iroquois to have been stimulated by the desire to capture and adopt linguistically similar individuals to restore the population lost to disease and warfare. Although a novel and creative concept, historical data does not support this contention.

The delineation of the subsystems and related scholarly studies leads to the discussion of the Huron as a culture group, and the applicability of utilizing them as a test case. In order to understand the Huron as a complex egalitarian culture group, a basic cultural profile by subsystem components is outlined next.

#### v. Huron Cultural System Profile

In the introductory chapter of this study, a general trait analysis of a 'complex egalitarian culture group' was offered. The Huron fit the basic criteria for this form of social organization, but also possess specific cultural characteristics which will be relevant to the upcoming discussion of decision-making contexts. Therefore, a general anthropologically-oriented socio-cultural profile of the Huron system will provide the essential 'baseline' or foundation for model testing.

No professionally collected ethnographic analyses exist for the initial European-Huron contact period (seventeenth century), but utilization of a variety of anthropological techniques for data extraction from existing sources allow for a relatively authentic composite picture of Huron culture to be created. The Huron are one of the most studied of the Woodlands Native American groups and contemporary writers have been prolific in their ethnohistorical treatment of the subject matter (Trigger 1969, 1985, 1987; Heidenreich 1971; Kinietz 1965; Tooker 1964, 1978).

This study will look at the history of the Huron, up to the French capitulation to the British in 1760. The late seventeenth century to mid-eighteenth century historic record is replete with Huron events and activities. This underscores the necessity of creating a general cultural profile of the Huron, in order to establish a framework on

which to build and evaluate decision-making, change and adaptation. The format will follow that outlined in the section on the general systems methodology.

#### A. Huron Ideological Profile

The establishment of a baseline of Huron ideology cannot be refined much beyond the general characteristic profile outlined in the methodology section. In the case of the Huron, this is because ideology is not well represented in the precontact archaeological record, and literal reading of early missionary recordings can be misleading. It is apparent that with sustained contact between the French and Native Americans, dramatic changes occurred in 'traditional' Huron cosmology, particularly burial practices, accentuating the need for caution when interpreting documents and assemblages (Kapches 1976; Williamson 1978; Knight and Melbye 1983). The ramifications of ideological change on the culture system is a much debated subject (Ramsden 1981; Grant 1984; Axtell 1985; Trigger 1987).

The precontact period archaeological record indicates that there were infrequent inclusions of goods in grave lots (Ramsden 1981; Knight and Melbye 1983). Burial practice included a variety of techniques: ossuary, quasi-ossuary, single interment, flexed, bundle, or extended. The Feast of the Dead ceremony, recorded by missionaries, may have been elaborated through time with the inclusion of more items, due to the influx of large quantities of trade items. Nevertheless, the feast operated under the same premise: to

socially bind members participating in the ceremony for future survival options.

The first detailed chronicler of Huron cosmology is the Recollet Father, Theodat Sagard (Wrong 1939)<sup>7</sup>. Recalling the low level of impact by missionaries with the Huron in the 1600s through 1630s<sup>8</sup>, it is suggested that the 1620s observations regarding basic Huron cosmology can be used as a baseline<sup>9</sup>. Sagard's initial reaction to his missionary efforts to the Huron was to remark on the language barrier. He noted that the Huron had no words for the "mysteries of our holy religion, not even the Pater noster, ... Sanctification, the Kingdom of Heaven, the most Holy sacrament, nor of leading into temptation ...", 'glory,' 'Holy Spirit,' 'Angel,' 'Hell,' or 'church' (Wrong 1939:73).

Sagard did find that the Huron took great care of deceased relatives, and "in their respect they surpass the piety of Christians" (Wrong 1939:75). The Huron cosmology was organized through dreams and visions, relating to personal spirits, demons, and desires. Behavior was guided by these dreams, within socially defined limits, and dream requests must be fulfilled. Myths and parables relating to creation, evil and good spirits, and souls abound in early historic Huron cosmology (Wrong 1939:170-172; Thwaites 1959 [hereafter referred to as "JR"] 5:191-257; JR 8:117-123; JR 10:127-133, 153-191).

The Huron's 'supreme deity,' named Oki, would later be substituted for the Christian 'God.' The Huron believed



that souls are immortal and everything found across the landscape possessed a soul: trees, rocks, and animals. The Huron told Sagard that "these souls, though immortal, have still in the next life the same need of drinking and eating, of clothing themselves and tilling the ground, which they had while still in their bodies" (Wrong 1939:172). This statement explains the rationale for grave good inclusions. The souls of the grave goods, according to the Huron, would go with the deceased Huron into the next world<sup>10</sup>.

In summary, the basic tenets of Huron cosmology at contact included a series of lesser good and evil spirits, the concept of Oki or supremeness, and human practitioners of 'witchcraft' or spell casting. Dreams or visions related to desires or cures had to be fulfilled, as a group effort, and usually with the aid of the village medicine man or shaman. Everything in nature had a soul, and along with the various spirits should be treated with due respect; not idolization or worship, but honored as equals<sup>11</sup>.

#### B. Huron Technological Profile

Direct French contact with the Huron occurred by 1615, with Champlain's alliance with the Attignaouantan and their military maneuvers against the Five Nations Iroquois. Prior to this, a few European artifacts found their way into Huronia, through indirect trade connections. Archaeological sites derived from pre-Champlain interactions are referred to as protohistoric, and are identified by the paucity of European materials. Ontario Iroquois or precontact period

sites contain no European materials and thus date from A.D. 1000 to circa 1580.

Despite Trigger (1987) and Heidenreich's (1971:219, 227-232) assertions that precontact trade was an insignificant factor of Huron culture, archaeological evidence and anthropological interpretation of historic documents suggest an alternative conclusion (Shea 1962(3):99; Wintemberg 1926; Wrong 1939:158; Ridley 1954; Dawson 1979). Although not present in large quantities, several types of items which would have been transported through trade networks are found in archaeological contexts. The importance of the trade networks does not necessarily lay in the volume of luxury or essential materials mobilized, but through serving as the conduit to socially bind trade partners. This allowed for some sense of socio-political unity between different cultural groups, based on 'peace treaties', and thus instilling peaceful interactions between the groups.

Archaeological manifestations of the precontact period trade include the widespread distribution of Huron ceramics<sup>12</sup> (Dawson 1979; Wright 1963, 1965; Ridley 1961), shell from the Atlantic seaboard (made into decorative items), cherts, and copper<sup>13</sup> (Wright 1974; Finlayson 1985; Stopp 1985; Latta 1983, 1985). Heidenreich (1971:230-232) concludes that the Huron were involved in direct trade (though minimally) only with their immediate neighbors. Whereas this may be accurate, it does not preclude the

possibility that long distance trade networks existed, with intermediary groups, or middlemen, providing links or steps along the route.

The basic material culture assemblage of the Huron changed throughout the Ontario Iroquois period, but the technological impetus for the items changed insignificantly. As the subsistence emphasis shifted to more reliance on agricultural products, the material culture assemblage reflects these modifications: increased numbers of hoes and grain grinding apparatus<sup>14</sup>. Throughout the Ontario Iroquois period, fired-clay ceramics undergo numerous transformations in style, decorative motifs, and shape (Wright 1966; Ramsden 1977), but as an object, the function of ceramic vessels does not vary. The fired-clay pipe assemblage becomes refined and well-developed by the end of the Late Ontario Iroquois period, suggesting that the evolution of the pipe production was concomitant with either an increased production or trade of tobacco and/or smoking products. The carved bone industry becomes more sophisticated through time, and includes decorative (combs, gorgets, beads), recreational (deer toe bone games, gaming discs), and utilitarian (projectile points, net needles, flakers) items (Wright 1966; 1974). Chipped stone tools, particularly projectile points, are infrequent throughout the Ontario Iroquois period assemblages.

In sum, the baseline picture of precontact/contact period Huron material culture is relatively fluid, with

change occurring gradually and consistently over at least 650 years. The technological baseline reflects agricultural requirements, a minimal reliance on hunting (dearth of points), and an expression of cultural creativity, through the refinement in the manufacture of decorative combs and clay pipes. In 1966, J.V. Wright, in reference to the Glen Meyer-Pickering dichotomy, epitomized the nature and relation of the entire Ontario Iroquois period material culture and technology. He states that

while there are numerous differences ... [in material culture through time] at the specific type and attribute level, there is a common cultural pattern with close correspondence to be seen in settlement pattern, burial practices, subsistence, and general quantitative artifact categories [Wright 1966:94].

### C. Huron Sociological Profile

One critical facet of the Huron social sphere that needs to be discussed is the matrilineal/matrilocal component of their social organization and structure, and the binding elements of reciprocity and egalitarianism. The early historic record indicates that the Huron observed the fundamental rules of a matrilineage for kin-reckoning, marriage partners, residence policy, inheritance, and mythological customs, organized through the principles of reciprocity and equality (Boucher 1883:56-57; Wrong 1939; 121-125, 130; JR 10:233; JR 20:215; JR 38:281)<sup>15</sup>. The matri-focus nature of Huron culture, which may have evolved and developed with the evolution of corn agriculture, organized the subsistence and settlement pattern, especially the division of labor and intra-village and intra-house

configuration (Trigger 1978; Latta 1983, 1985; Dodd 1984; Warrick 1984; Finlayson 1985). The prehistoric archaeological record of the Huron indicates that they moved their cultural 'territory' or resource base from southern to northern Ontario over a several hundred year period. During this time, they were gradually contracting the territorial base, in part as agricultural techniques and production yields improved<sup>16</sup>, and in part as social identity and boundary maintenance perhaps became better defined.

Other aspects of Huron sociology fall within the basic confines specified in the methods section of this thesis. That is, the Huron had in place a set of social rules, obliging group members to participate accordingly or suffer admonishment. Expectations for member behavior was disseminated orally through myth and story telling. In brief, the Huron sociological subsystem possessed relevant and effective institutions to manage social criteria, including marriage and residence, behavioral expectations based on shared information, and kinship. The underlying 'theme' of the Huron social subsystem is the social binding and uniting of members, resulting in the formation of a particular (though flexible) group. This is performed through a set of shared beliefs and experiences, and thus members are obligated to sustain the group's existence.

This thumbnail sketch of the Huron subsystems, with relevant referencing, provides a baseline from which to address decision-making processes. Importantly, this

discussion indicates that the Huron, as a culture group, were not fixed or static in behavior, as manifested in the archaeological record, prior to the European contact. The archaeological evidence records several hundred years of culture group flexibility, fluidity, and adaptability<sup>16</sup>. This is a critical conclusion when looking at the effects of cultures in contact and will be drawn upon in upcoming discussions.

## Endnotes - Chapter 2

<sup>1</sup> In Boulding's first footnote (1956:197, footnote 1), he notes that "The name and many of the ideas are to be credited to L. von Bertalanffy, who is not, however, to be held accountable for the ideas of the present author!"

<sup>2</sup> It is not the purpose of this study to debate the issue of what constitutes theory, particularly since it is not considered relevant to the delineation of decision-making processes. The relevancy of general systems theory, or rather the general systems approach, lies in its ability to provide an organized and replicable structure, or methodology on which to build the model of decision-making.

<sup>3</sup> Nevertheless, most of Salmon's comments are geared to a level of discussing semantics. She feels an adequate definition of 'system' is a major obstacle to applying the principles of general systems theory to archaeological studies (1978:176-177). She also states that all archaeologists have done with general systems theory is to pick up on the jargon (noting apparently that archaeologists are at their best (and happiest?) when they can partake in the "importation of a pseudo-scientific jargon which tends to obscure rather than clarify the issues" (1978:174). She also incorrectly criticizes Flannery (1968) for saying that he is using general systems theory, when she feels he is not. Flannery never says he is using general systems theory, but rather a model he refers to as "ecosystems analysis" (1968:68). He admits erring in calling his paper "Archaeological Systems Theory and Early Mesoamerica" because critics assumed he was referring to Bertalanffy's (1950) "general systems theory" (Flannery 1986:19-20). The general concept considered valid from Salmon's critique (1978) is to be wary of borrowing terms from other disciplines without appropriate knowledge of the applicability and usage.

<sup>4</sup> As opposed to a closed system where "there is no import or export of energy" or information (Hall and Fagen 1956).

<sup>5</sup> As an example of the arbitrariness of subsystem headings, which can be "transparently based on the prejudices of current opinion" (Clarke 1978:102) other schemes are rampant in the literature on systems modeling. Clarke (1978:101-131) models cultural subsystems by representing five units: social, religious, psychological, economic, and material culture.

6 Economically related subjects, such as settlement pattern, seasonal movement, resource scheduling, resource preference, food taboos and possible associated rituals, can cross over into the ideological subsystem, emphasizing the indiscriminate nature of dividing a cultural system into subsystems. 'Economics' cannot be separated from ideology, technology, and sociology - it underlies and weaves together the system, and accordingly, there will be some overlap in discussion.

7 Several of the seventeenth century missionaries are recorders of detailed, careful accounts of Native American lifeways, providing cultural characteristics at a level hardly surpassed in North American ethnographic analyses until the turn of the twentieth century. Unfortunately, many of these essays cannot be used in contemporary ethnohistoric research because the primary authors do not enumerate the specific culture group being described. Two detailed cases of this are the journals by Le Clercq, Lafitau, and Lescarbot (cf. Trigger 1985).

8 Actual numbers of French military, explorers, and missionaries in New France during the first half of the seventeenth century are minimal. Considering that the Huron numbered at least 18,000 (cf. Heidenreich 1971:91-106) settled in a 400 square mile area, the level of impact generally accredited to half a dozen missionaries is suspicious. A basic chronological profile of the influx of Europeans into Huronia begins with the arrival of Champlain and settlement by his assistant Brule during the period 1608-1615 (JR 1). In 1615, the first Recollet priest arrived, Father Le Caron, but his ventures were thwarted by unreceptive Huron. He returned in 1623 with Father Nicolas Viel and a lay brother, Gabriel Sagard. Sagard was a meticulous chronicler of the Huron lifeways and left behind a valuable research tool for later studies (Wrong 1939). In 1626, the Recollet Father Dallion was accompanied by two Jesuits priests, Fathers Jean de Brebeuf and Anne de Noue. In 1627-1628, the historic record indicates that Brebeuf was alone in Huronia, with 18,000 natives. The French surrendered Quebec to Britain in 1629, with Brebeuf leaving immediately. The Jesuits returned to Huronia in 1632, with Brebeuf and 2 companions arriving in 1634. The first notation of the baptism of a healthy adult Huron occurs in 1637, which insinuates that the baptism was by choice and with some fundamental understanding of Christian tenets. The 1636-1637 epidemics undoubtedly resulted in the baptism of hundreds of Huron, who possessed at best a rudimentary understanding of Catholicism (i.e., baptism kept them from being set on fire forever in the eternal flames of Hell). By 1639, there were 13 Jesuits in Huronia, and by 1647, 42 Frenchmen and 19 Jesuits (cf. Wrong 1939; Grant 1984:5-12).



9 Refer to Steward (1942) and the direct historic approach methodology, and Trigger (1978) who discusses the limitations and problems of applying the direct historic approach with any degree of confidence or accuracy. Trigger (1978:57) criticizes the practice of using early contact period documents for illustrating societal organization prior to contact. One of his gripes is that the relevant data about the Huron "were not recorded by people who were knowledgeable about non-western kinship and family organization" (1978:57). In fact, preconceived notions or 'cultural baggage' regarding differently organized culture groups could have been a disadvantage to recording. An open mind observing disparate behavior may have provided some of the least biased accounts of early contact period Native American lifestyles. Perhaps Trigger should have emphasized the problems that occur when early observers try to interpret the meanings of the differences.

10 An instance where a Native American group tried to explain the concept of animism and soul departure to Europeans is detailed by Martin (1975) in "The Three Lives of a Micmac Pot". The French tried to explain to the Micmac that the grave goods did not follow the deceased anywhere, and thus, dug up a grave. Upon finding the copper kettle still in the ground, the French felt vindicated in their efforts. That is, until the Micmac thumped the bottom of the pot, resulting in a dull thudding noise. The Micmac concluded that, in fact the soul of the pot had gone on with the deceased individual, taking with it the ringing noise that could have been elicited from it before its burial.

11 This fundamental concept of equality or egalitarianism, found in all eastern Woodlands Native American groups, is at odds with C. Martin's (1978) thesis that Native Americans launched an intentional aggressive assault at animals in an effort to revenge themselves against the change instigated by the fur trade by destroying nature (cf. Krech [1981] for critique).

12 Dawson (1979) attributes the presence of Late Ontario period Huron ceramics at Algonkian village sites to the capture of Huron women by the Algonkians. Trigger elaborates and states that "foreign-style pottery found in small amounts in a village site, especially if trace-element analysis shows it to be made of local clays, may indicate that it was manufactured by women captured from a foreign group" (Trigger 1984:10). The captured women, thus, (1) brought their own pots with them, or (2) brought along the knowledge to make traditional Huron pots and motifs. Trace analysis of clay sources will answer whether (1) or (2) occurred, but it will not conclusively address the issue of whether the pots were traded or 'captured'. If local clays are used, it may well be that Huron women were captured (or adopted). Trigger also states that the "Reciprocal presence

of foreign-style pottery in two groups more likely indicates mutual bloodfeud and raiding than it does peaceful trade. Imported pottery, especially if it occurs only in particular sections of villages, may attest the forcible or voluntary relocation of extended families as a result of warfare" (Trigger 1981:10). It is the opinion of this author that if the clays originated in Huronia, the pots could be either traded or transported with captives or group members who moved voluntarily (or any combination thereof). If the clays originated in the 'foreign' area, the makers could be voluntarily relocated, captives, or the motifs exchanged or borrowed. There are too many variables and options available to completely discount the possibility of pots being used as trade items.

13 Recent research concerning the types and quantities of European goods that were shipped to New France for trade with Native American groups (and for French consumption) indicates that the archaeological record presents a skewed picture of trade good preferences and underestimates the significance of perishable goods, particularly cloth and clothing (Anderson 1990, personal communication). The archaeological record of the Late Ontario Iroquois period may well reflect the same bias by over-emphasizing the importance of non-perishable trade items. It is suggested that precontact period trade could have also included significant quantities of agricultural products, fur and pelts, tobacco, or fiber containers.

14 If the stories and myths had been recorded throughout the Late Ontario Iroquois period, we would certainly see an evolution in the treatment of certain subject matters, shifting towards agriculturally related allegories similar to those recorded during the historic period (cf. Barbeau 1915a, 1915b; Clarke 1870; Schorer 1986; Hewitt 1903-28; Parker 1989:28-64, 206).

15 Richards (1967) states that the Huron may have been matrilineal in theory, but it is not what was practiced. Richards believes the matri-focus of the Huron developed with the social instability instilled by the fur trade. Trigger (1978:56-57) critiques Richards' use of historic accounts and suggests that misunderstanding of the documents and the fundamental principles of a matrilineage has led Richards seriously awry. Smith (1970) uses Richards' ethnohistoric cases and concludes that the Huron matrilineal residence rules deteriorated through European contact and the changing importance of the role of men. Tyyska and Hurley (1969, in Trigger 1978:57) look at archaeological evidence of longhouse size and conclude that the decrease in longhouse length in the historic period is a reflection of the breakdown of the matrilineal organization of the Huron, again due to stress from the fur trade. Archaeological investigations at Late Ontario Iroquois sites (Warrick 1984;

Dodd 1984) indicate the length of longhouses was gradually decreasing long before any impact from the fur trade. Hayden (1977, 1978, 1979) asserts a corporate nature to the Huron social organization, stimulated with European contact, through competition for trade routes and material wealth acquisition. Longhouse length is said to have increased, and thus, the matrilineage concept develops and strengthens, with the competition and quest for more corporate members per household. This subject will be discussed in more detail in Chapter 8.

16 An issue that has concerned Ontario archaeologists for decades relates to the movement of proto-Huron groups during the Ontario Iroquois period. The fluidity and flexibility of Ontario Iroquois groups is manifested in the prehistoric archaeological record. Uren Substage sites (Middle Ontario Iroquois period) have generated evidence for the fusion of the Early Ontario Iroquois period Glen Meyer and Pickering Branches (Wright 1966:60-63), with Uren then evolving into Middleport Substage. Throughout the Early and Middle Ontario Iroquois periods, cultural groups moved fluidly across the landscape of Ontario, with fission and fusion of distinctive groups apparently a tangible option. During the Late Ontario Iroquois period, the Middleport folk split into a Huron/Petun Branch and a Neutral/Erie Branch, each with a north and south division. A 'no-man's land' zone lay between the two basic branches. By the historic contact period, the Huron had split from the Petun, and Neutral from the Erie, with each group coalescing into a much reduced, distinct territory. Agriculture certainly allowed for denser population concentrations (but they could have been denser [cf. Trigger 1978:59; Kroeber 1939:143]) which occurred during the Late Ontario Iroquois and early contact periods. Trigger (1984:20-23) sees that shift of protohistoric Huron into a smaller area as a time of great upheaval due to the influx of trade goods (indirect networks), which resulted in the settlement shift and a new social order: "The social and political changes associated with these shifts in settlement must have been accompanied by much uncertainty and tension and probably by overt conflict" (Trigger 1984:23). The movement and coalescence of the Huron tribes into a small geographic region thus resulted in a "new Huron society [that] was larger and more complex than it had been previously" (Trigger 1984:22). Trigger's article (1984) is full of vague statements with little documentary evidence, such as these mentioned. On the same page he admits that the unaccustomed wealth of the early 1600s would have enhanced the prestige of chiefs, and goes on to state that there were not enough trade goods coming into Huronia to satisfy the needs of the Huron (1984:21). One must question the number of items and subsequent level of impact Trigger is indicating.

CHAPTER 3:  
A Model of Decision-Making for a Culture Contact Context

I. Introductory Comments

There is a need in current anthropological research for the construction of a general model for the examination of decision-making processes within a culture contact context. This is considered to be imperative due to the recent attempts by some authors to breathe life into outdated, ethnocentric, and inflexible acculturation theory (cf. Clifton 1989; Mason 1988; Hall 1989; Skinner 1990). A model of decision-making overcomes the difficulties encountered with acculturation theory because it addressess the contexts of problems, and the processes of solving these problems. Decision-making allows for adoption, adaptation, innovation, and static behavior.

Modeling of decision-making is done in an attempt to create a general framework from which to look at these processes and the ramifications for change, continuity, and cultural viability, specifically in a culture contact context. By outlining fundamental organizational constructs, contexts of the decision-making or problem-solving process, and expectations of culture subsystems' behavior, it is anticipated that the model will be general enough for future explanation of contact processes in cross

cultural studies, but rigorous enough to generate predictions which simplify the specific processes of contact.

As there is no 'model-builder's guide to model building,' this chapter begins with a position statement on the purpose and ramifications of modelling. The current scholarly thought on decision-making is then outlined, to put this rapidly growing body of research into historical and theoretical perspective<sup>1</sup>. This is followed by a brief discussion of anthropological and archaeological applications of decision-making, particularly in an environment-change context. Several broad operating assumptions will be outlined in relation to the processes of decision-making. As previously stated, these operational assumptions are culturally-derived and oriented, forming the basic guidelines within which the model will operate. Without them, the model will float in an anthropological or cultural void.

There are two broad approaches to anthropological research, including the study of decision-making, often considered to be mutually exclusive in their orientation towards anthropological or social topics; namely the 'scientific' and the 'humanistic' approaches. Not subscribing wholly to either perspective, it is believed here that these approaches are not mutually exclusive in their aims, nor do they necessarily yield disparate results. Therefore, the humanistic approach during this research will

focus on how people create decision-making institutions on the basis of conscious knowledge (cf. Berger and Luckmann 1966; McLeod and Chaffee 1972; Martin 1972; Riches 1982), whereas the scientific aspect of this study focuses on the unconscious forces (i.e., environmental, ecological) which embody the course of decisions (cf. Jochim 1981; Keene 1981; Riches 1982).

## II. Modelling

The purpose of a model is to structure the investigation in an explanatory, as opposed to descriptive or functional, framework (Clarke 1972:2). As an ideal construct, a model is a simplification of "reality which keeps intact the essential features of a problem and its proposed solutions" (Moore 1981:196). By simplifying complexities of real world phenomenon, a model's usefulness comes in its ability to generate testable predictions that allow us to see these complexities (even though we may not be able to account for them), and to look at relationships between variables. Models are capable of simplifying complex processes because they ignore 'noise' considered unnecessary to the frame of study, and "by accurate generalization within it" (Clarke 1978:31).

Several anthropological and archaeological model building attempts rely on the work of Levins (1966) for guidance (cf. Clarke 1972, 1978; Jochim 1976; Winterhalder 1981; Moore 1981; Keene 1981). Levins indicates that ideally, a model should simultaneously achieve generality,

realism, and precision. Since it is rarely possible to attain all three facets, Levins created a typology of models of which there are either (1) realistic and general models, (2) realistic and precise models, or (3) general and precise models (1966: 421-425). Real and precise models, operating under the assumption that predictions will result in observations of real and precise behaviors, tend to rely on rigorous hypothesis generation and testing, and thus, usually the quantification of data. Archaeologists often use this methodological orientation for modeling and testing predictions about cultural processes utilizing the material culture record.

The procedure of this study has been oriented towards qualitative data. Therefore, a model classified as general and real is considered the best framework for generating predictions of decision-making and culture change. In this model type, predictions are "expressed as trends between polar states of the controlled variable" (Moore 1981:197). Examples of trends might include predictable versus unpredictable resources, heterogeneous and homogeneous habitats, and in this case, traditionalism or adaptive decisions. This type of modelling, as with the general/precise type, does not necessitate an exact fit between predictions and reality (as mandated in quantitative models). The predicted behavior can deviate from the behavior observed through the data. These deviations become the focus of the research and variability must be "analyzed

to locate the existence of factors which identify how the specific case at hand differs from what are thought to be the general factors of the problem" (Moore 1981:197).

### III. Theoretical Perspective: Individual - Group Decisions

It is necessary to lay the foundation of decision-making principles (sometimes referred to as problem solving, with little or no differences in content offered) in order to put the ensuing model into perspective. There are two organizational levels at which decisions can be processed: (1) individual and (2) group. These two levels are not mutually exclusive, but should be considered complimentary and interrelated. Many research efforts, particularly in the fields of psychology and sociology, have focused on the small group as an organizational construct, in part, because this has been found to be where many decisions are formulated (cf. Collins and Guertzkow 1964; Alland 1970; Wharton 1971; Rapoport 1974; Heath 1976; Hoffman 1979; Kowitz and Knutson 1980). The small group structure also provides a sample size of adequate and yet manageable proportion for study and replication of decision-making processes.

There are several critical differences between decision-making processes of groups and individuals, depending on the level of social organization under consideration. In a twentieth century Euro-american context, individuals generally orient decisions towards individual or self-serving goals. Group level decisions are



goal oriented for the group, and the group provides the context for the decision-making system. Thus, the group becomes more than a convenient context for a given number of individuals to coalesce to make decisions. A group is a specific process for making decisions in a social and cultural context.

Within egalitarian social systems, group decisions arise as the sum total of individual decisions. The individuals are linked through networks of reciprocity, which transmits materials and information within the group (and between groups). Decision-making responsibilities are operational at the individual level, within a given set of societal norms. From this level, a group pattern of decision-making emerges, collectively because the individuals are bound together by a common cultural heritage of goals, norms, beliefs, and shared experiences. The satisfying of group goals, culminated through appropriate and relevant individual decisions, is processed through the communication or information flow system. Feedback about decisions between group members thus becomes a critical aspect of the decision-making process.

Individuals comprising a group, during the decision-making process, are found to operate within the realm of group norms, expected behaviors, beliefs, and goals. Groups process decisions through member cooperation, conflict, coercion, and consensus. The 'leader' of an egalitarian group acts as the facilitator of individual decisions at the

group level. Options available to group members concerning a particular decision are: (1) to agree or consensus, (2) to disagree but not actively, so that group commitment surmounts dissension, and (3) disagree and factionalize from the group. A fundamental characteristic of complex egalitarian culture groups is the fluidity of group membership and the option to factionalize or amalgamate for a variety of reasons<sup>2</sup>. In a complex egalitarian culture system, there can be several kinds of groups, with membership rules varying in conjunction with the function of the group type. A culture system can have a collective or holistic group identity, as can subgroups such as a nuclear or extended family, war or peace councils, clans or phratries. Each group serves its own function, is comprised of a set of individuals who operate and are defined by, at least to some degree, a set of rules, norms, and beliefs.

A group member may not agree with a group decision, but a characteristic (ideally) of a group is that members will commit themselves to a group decision, whether or not they agree with that particular solution (Kowitz and Knutson 1980:14). Zaleznik and Moment contend that a consensus based solution does not mean agreement by all group members, but rather

... lies in the degree of personal commitment the members feel towards the group decision after it is reached ... even though some members might disagree with the decision on principle, they will accept it and personally carry out their part [1964:142].

Several basic differences between individual and group level decisions have been discussed, but further explanation of the group type approach to decision-making is necessary in order to portray the full dimensions of this process. In essence, the group decision-making process, in the context of egalitarian Native American cultures, is basically comprised of the collection of individual actions, as opposed to twentieth century Euro-american group decision-making processes. In the latter, the will of the people, often manifested by a majority vote, prevails above all other decisions<sup>3</sup>. In the former circumstance, the egalitarian individuals who comprise a group and share membership rules make their own decisions. From this behavior, a group pattern of decision-making emerges, because of the common cultural heritage (i.e., goals, norms, beliefs, member identity) and shared experiences of group members, who operate within the same overall cultural system. Concepts that are introduced in this discussion, such as goals, norms, and leadership, will be explicated as operating assumptions in an upcoming section.

A group has two interdependent dimensions which are inherent in the decision-making procedure: (1) social and (2) task. The social dimension refers to the interactions and relationships of group members and the task aspect encompasses group members and their relation to work or production (Kelley and Thibaut 1954:736). The task and social dimensions comprise the group process and are

interdependent in that "group members make a decision and develop ideas at the same time and in the same manner that they develop a group structure and get along together" (Fisher 1980:39). Thus, the value of the group process is not necessarily in making successful decisions, but in the commitment of members socially and productively to cooperate effectively for implementation of decisions once they have been formed. This concept is of paramount importance to norms, deviance, conformity, leadership, and influence of group members towards the maintenance of the cultural system's structure (Hopkins 1964:183-184).

A phenomenon of group decision-making that does not occur at the individual level is referred to as the 'risky shift'. Shaw (1976:70-77) indicates that collective members of a group are more likely to make risky decisions than an individual faced with the same goals and set of solution options. Greater-risk taking is attributable, in part, to the fact that responsibility for the decisions can be diffused to some degree among group members. Groups also possess greater information reserves from which to evaluate the 'riskiness' of a decision. Similarly, studies of group versus individual decisions indicate that groups generally make better decisions, in part because the combined input and information available to the group supercedes any individual's capabilities or resources (Collins and Guetzkow 1964:15-28).

It should also be noted that the group decision-making process is equal to more than the sum of all individuals in the group (the whole is greater than the sum of its parts). A group performs tasks not attainable by an individual and this is again related to cumulative information flow. Fisher (1980:65) notes that "the most capable individual in the group is still incapable of producing the critical exchange of ideas developed by the demands on the group to achieve consensus".

Group level decisions (as opposed to individually processed decisions) provide one organizational format for investigating complex egalitarian culture group decision-making processes. The complex egalitarian culture group operates through consensus-based decisions, and is thus a nonhierarchical decision-making structure<sup>4</sup>. Although there may be decision-making sub-groups within a complex egalitarian culture group, such as councils or special-function sodalities, there are no formally sanctioned full-time leader positions. The superfluous authority vested in complex egalitarian culture group 'leader' or 'chief' positions is expanded in the section on operating assumptions. Decision-making in a complex egalitarian culture group differs significantly from hierarchically stratified decision-making processes of social organization (such as 'chiefdoms') where an individual (i.e., 'ruler' or 'dictator') has real authority vested in him/her as the

political leader to makes decisions, order group consensus, and enforce implementation.

This study will attempt to assess decision-making at the individual and group level of organization. The emphasis will be at evaluating individual level decisions, since these decisions are the impetus for later group processes. Whether the data to be used in this study will bear the brunt of this rigorous assessment remains to be addressed, but in many instances, individual level decision-making processes are certainly viable for study.

#### IV. Historical Perspective: Decision-Making Models

Decision making models within sociological studies fall into one of two principle categories: (1) linear and (2) spiral models. Linear models are, simply stated, a step-to-step sequence of decision-making. These require no 'looking back' at previous steps, although the process does depend on progressive building from each step forward (Fisher 1980). In essence, decision-makers, whether at the individual or group level, must complete step 1 before they can proceed to step 2. Spiral models entail phases that are implemented in a process of cumulative reflection. Reference back to previously introduced ideas allows for feedback, information flow, accumulation of knowledge, and reinforcement of preliminary decisions, which is then used in later steps to build towards group decision consensus (Fisher 1980).

### A. Linear Models

One of the first proponents of the step-by-step, linear progression model was Dewey (1910). He organized the decision-making process into six steps: (1) a difficulty is felt or expressed, (2) the nature of the problem is defined, (3) the nature of the problem is analyzed, (4) possible solutions are suggested, (5) solutions are compared and the best solution selected, and (6) the best solution is implemented (cf. Fisher 1980:131). Subsequent step or linear models only served to fine-tune Dewey's concept (Bales 1950; Tuckman 1965).

Bales (1950) and Bales and Strotbeck (1951) compressed Dewey's (1910) model into three decision-making stages: (1) emphasis on orientation [deciding what the task is], (2) emphasis on problems of evaluation [deciding what attitudes should be taken towards the situation, i.e., conflict, conformity], and (3) emphasis on problems of control [deciding what to do about the task, or making a decision].

Tuckman (1965) isolated two types of problems encountered simultaneously in the decision-making process. A group social structure problem is present (how do members get along), as well as a task problem (how do members proceed towards a product). These two interrelated aspects of the decision-making process provide Tuckman with the foundation principles for the following linearly ordered model, with the [a] point relating to the social structure and the [b] point referring to the task problem. Tuckman's

model includes a phase for: (1) Forming [a] testing and independence, [b] attempting to identify the task; (2) Storming [a] development of intragroup conflicts, [b] emotional responses to task demands; (3) Norming [a] development of group cohesion, [b] expression of opinions regarding tasks; and (4) Performing [a] functional role-relatedness, [b] emergence of solutions.

The use of 'game theory' for understanding decision-making processes was developed in the 1960s and 1970s and operates under the assumption that rational decisions are made for the resolution of conflicts, or the solution of problems (Rapoport 1960, 1974; Alland 1970). In conflict situations the (1) players have (2) rational strategies, which offer a variety of (3) outcomes, which lead to (4) payoffs (Alland 1970:2; Rapoport 1974:1-2). In psychosociological terms, a (1) group has (2) norms, which offer a variety of (3) options, which lead to (4) decisions.

Most research of decision-making processes assume rationality on the part of groups or individuals. This assumption may not reflect reality (cf. Fisher 1980), but does provide a baseline from which to measure and explain variability. Heath (1975) uses rational choice theory to critique exchange behavior. Assuming rationality on the part of participants, Heath uses the rational choice approach to look at the way in which people choose given their belief system (1975:75-76). Beginning with the assumption that a group has given wants, goals, and values



('utility functions'), Heath concludes that decisions will be selected which provide a satisfactory outcome (though not necessarily the best choice, if it involves too great a risk [cf. Rutz 1977]). Thus, decision-making, relying on social norms and beliefs for rational behavior, again entails a linear, unidirectional process: (1) goal objectives and orientation, (2) choices based on risk, certainty and uncertainty, and (3) outcomes or decisions (Heath 1975:7-13).

In the outline of a creative problem solving process, Hoffman's valence model waivers between advocating unidirectional linearity in his hierarchical steps (1979:159-183) and reflection and cumulative knowledge in his general discussion of the topic (1979:4-89). Hoffman posits a 'valence' model where valence is the positive force an idea exerts on a group. In decision-making, valence is the degree to which a suggestion is acceptable by the group. Solutions to problems accumulate valence "according to their perceived consistency with the underlying beliefs and attitudes of group members" (1979:89) and by forming a solution pattern that "is a combination of previously disassociated experiences" (1979:4).

Although Hoffman is on the verge of stating that the decision-making process relies on reflection to previous ideas and building from accumulated information, his "hierarchical model of group problem solving" has all the ear marks of a typical linear phase model. This five step

process entails: (1) defining [the general nature of the problem], (2) specifying [barriers to overcome], (3) generating [alternative solutions], (4) evaluating [solutions], and (5) implementing [solutions] (1979:2-11).

Kowitz and Knutson present a model of the decision-making group that is comprised of three steps, with the majority of the decision-making action occurring in the last phase. Initially, there is a phase of: (1) interaction structure [the manner in which group members exchange information], (2) group structure [including roles and functions of group members, group norms, and cohesiveness], and (3) decision structure [or the manner in which group members search for information, make decisions, and resolve conflict] (Kowitz and Knutson 1980:15).

In summary, phase models of decision-making are characterized by the same basic unidirectional, linear stages. They are basically comprised of an (1) initial orientation phase, (2) a period of conflict (where social norms are invoked), and (3) a creative and effective step for performance of the tasks, where the group makes decisions by achieving consensus and validating solutions.

It is felt here that a fundamental flaw with the phase rationale for decision-making lies in the reality of the implementation of such a process. It must be questioned whether 'on-the-ground' decision-makers undertake such a logical step-by-step progression in actually implementing a decision-making process. Researchers of small group

decision-making processes in the late 1970s and 1980s suggest that the phase procedure is an adequate theoretical outline of decision-making, but the reality of the process is much different (Fisher 1980; Kowitz and Knutson 1980). Direct observations (Fisher 1980) of group decision-making suggests that small groups not only skip steps in the phase process of decision making, but implement other phases, as well as reflecting and accumulating knowledge and information back and forth between steps.

#### B. Spiral Models

Analysis of the decision-making process by Crowell and Scheidel (1964) suggests that the group process occurs in a 'spiral' manner. That is, an idea concerning a goal or problem is presented, and is then subjected to group or individual agreement, modification, or rejection. When agreement about an idea is tentatively reached (though not a final decision), the idea is remembered or 'anchored' in the group memory (it is stored). A second idea relating to the group goal is introduced, using the initial idea as a point for progression towards decision-making. If the second idea is rejected, the initial idea is reflected back to in an effort to introduce another idea. The accepted ideas are constantly reflected upon and reaffirmed throughout the process.

The spiral process of decision-making differs in three primary ways from linear models. First, the group is constantly retracing its path of idea development for

problem solving in a reflective and cumulative fashion. Second, the decision-making process involves the introduction of a series of ideas related to a single goal or problem, which are modified and reaffirmed for use in the subsequent information flow and feedback process. Last, whereas linear models position the bulk of the decision-making activity in the latter phase of the process, the spiral model indicates that the majority of the activity occurs initially, with a vast backgroup of information available when the decision finally emerges.

The strength of a spiral approach, as opposed to a linear approach, is that it addresses the realities of the decision-making process, revealing that it is not a formula or ordered process, but one with flexibility in its reflective nature. Linear or step models are not as flexible and do not allow for the interjection and rejection of ideas, cumulative knowledge and experiences, and flow of information to build solutions. Rather, observation of decision-making behavior suggests that the process is one where internal and external input is occurring throughout the process, with rejection, accumulation, and storage of ideas (Fisher 1980).

The interaction between group members, accumulation of information, and necessity of reflecting on prior knowledge characterizes the spiral decision-making process. These principle components of the model are well suited for use in this study, particularly along the line of the

methodological orientation. The general systems approach, with culture system variables interdependent and linked through information flow and feedback, is applicable to the spiral process of decision-making.

### C. Anthropological and Archaeological Models

Anthropological and archaeological studies provide models of decision-making focusing on ecological and subsistence-based topics (cf. Thomas 1971; Reynolds 1978; Harris 1979; Rindos 1984; Jochim 1981; Keene 1981; Moore 1981; Riches 1982). For instance, Barlett (1977) looks at the change in land use patterns in a peasant community to analyze the structure of decision-making (emphasis mine). Rational actions, economics, environmental adaptation and decisions regarding Fiji land tenure are explained in "terms of a cognized model of functionally significant technoenvironmental relationships" and decision-making (Rutz 1977). Wharton (1971:152-180) analyzes maximization of security and production based on risk-taking and decision-making. None of these anthropological studies offer a model of decision-making, but utilize the concept of making decisions in a particular context to come to conclusions about adaptation: it is a foregone conclusion that decisions will be, and are made, towards some goal or solution. The issue of how the decision processes are organized and operationalized contextually are not considered.

The utilization of decision-making in archaeological studies often warrants the creation of complex computer

simulation programs (cf. Keene 1981; Winterhalder and Smith 1981; Reynolds 1986). Moore (1981) complains that these models necessitate an "all-knowing, computationally perfect decision maker"<sup>5</sup>. The topic of these studies is usually related to subsistence, whether procurement strategies, settlement system and resource management, or the origin of agriculture (cf. Thomas 1971; Jochim 1981; Flannery 1986).

In the study of hunter-gatherer subsistence and settlement, Jochim (1976, 1981) sees the decision-making procedure as the delineation of a specific problem, identification of procedures, and the specification of applicable rules, values, means, etc. relevant to solving the problem. Using a systems approach, Jochim discusses the constraints on decision choices, goals, and adaptation. He concludes that there is need for the construction of a general framework within which to examine the processes of decision-making (1981:205-213). He presents a basic outline, similar in format to linear models offered by psychologists and sociologists. Referring to decision-making as 'coping behavior', Jochim outlines the procedure as involving a component of problem recognition, selection and execution of a response, and avoidance or resolution of conflict. The latter element is consistent with Fisher's position that conflict is an integral and positive force in decision-making, instigating discussion, information flow, better founded decisions, and facilitating group cooperation (1980:238-240).

Flannery (1986:14) states that a basic principle of decision-making is that decisions are created to deal with uncertainty, and not necessarily to maximize options or productivity. He uses this tenet to create a model of decision-making to assess the origins of Mesoamerican agriculture. Paramount to his model is the concept of adaptation by trial and error, with group memory storing, processing, and providing information for decision processing. Reynolds' (1986:439-441) computer model proceeds to demonstrate the importance of feedback and information flow to make experience-based decisions.

These archaeological and anthropological studies which utilize decision-making as an explanatory device are significant because they demonstrate the relevance of relating change to the storage, processing, and exchange of information. Acculturation theory does not allow for the accumulation and utilization of experiences and information for decision-making.

#### V. Basic Assumptions About Decision-Making

The delineation of the process of decision-making necessitates the statement of several fundamental assumptions concerning information flow, leaders and influence, norms, goals, deviance, conflict and conformity.

##### A. Information and Communication

At a basic level, the cultural system can be said to be an information system (Clarke 1978:86). It is also a system of energy and of matter (Flannery 1972). Energy flow in a

system can be observed and measured by increments, such as calories, related to dietary and subsistence considerations. Matter flow is reflected in economics and is quantifiable by weights or similar measures. Information processing is not accorded such diligent attention and this is "distressing because it is the information exchanges which regulate many of the matter-energy transactions" (Flannery and Marcus 1976:374). The emphasis on matter and energy, particularly in archaeological research, is attributable to a bias in the available data (but this is certainly no excuse); information storage and processing do not manifest themselves in the quantifiable manner as do energy and matter through the material culture record. The lack of attention to information is also due in part to the penchant of archaeologists to count or quantify things. Qualitative data, such as information, is considered difficult to measure and model, and thus not used in many adaptation oriented models such as optimal foraging strategies (Winterhalder and Smith 1981) or linear programming (Keene 1981). Moore (1981), Reynolds (1978), Reynolds and Ziegler (1979), and Reynolds (1986) represent the few attempts to model the role of information in cultural adaptation.

It is assumed that the processes of decision-making rely on the storage, processing, and exchange of information among group members (Kowitz and Knutson 1980:11), with the information concerned inevitably with energy and matter flow. The decision-making and information systems are



assumed to be interconnected and interdependent, with regulation through feedback (refer to the general systems approach discussion). Group communication, as an organizing mechanism of information, provides the format for the retention and transmittal of information, testing of ideas, exchanging opinions, and the achievement of consensus concerning decisions (Flannery 1986:20). Although this appears to be circular in composition, it is not meant to be a tautological explanation for the processing of information and processes of decision-making. It is, in fact, a reflective program, where the communication-information systems are utilized to process data for creation of a solution to a problem, and ultimately, decision-making.

Information can be communicated through the culture system as reaffirmation of existing traits, or as the introduction of new information, which can be accepted or rejected (Clarke 1978:88-89). If new information is accepted into the system, it is used to build on the old information in one of four manners: (1) new [gain], (2) alternative [disjunction], (3) contradictive [equivocation], or (4) confirmative [redundant] (Clarke 1978:89). These categories of new information can be viewed in the archaeological record as addressed in Chapter 6.

Information can add fresh variety into the system that does not necessarily have to culminate in system dislocation or disintegration. Referring to the new information and old information generating 'new variety' into the system as a

"blending strategy", Clarke (1978:93) observes this new procedure "in 'new' economic strategies blending formerly independent components, in 'new' mythologies or religions blending formerly alien ones, and in 'new' social patterns integrating components from several sources". This provides a method for maintaining system 'equilibrium' and is thus "revealed as a very important stimulus for the production of 'new' patterns in sociocultural subsystems" (Clarke 1978:93).

#### B. Cultural Norms

An integral component of the information system, and thus the decision-making process, are the cultural norms held in common by group members. It is assumed that group members share a set of norms which provide the baseline for acceptable behavior. Thus, group goals are attained through the social activity as regulated by the norms. It is also assumed that goal-oriented behavior is rational behavior, and that it operates to satisfy group norms. The norms provide standards for group behavior which in theory, result in group member conformity (Fisher 1980:180-181). Thus, norms specify that "members ought to behave in a certain way in certain circumstances" (Homans 1961:46). Cultural norms provide the boundaries for acceptable behavior and tolerable deviance, and position, guide, and regulate the decision-making process.

Gibbs (1965) presents three definitional attributes of norms: (1) collective evaluation [which implies the social

system's evaluation of what behavior ought to be], (2) collective expectation [which implies what the social system expects behavior will be], and (3) reactions to behavior [which implies the existence of rules or laws]. The latter point offered by Gibbs (1965) is reflected by group members' constraint to conform, or act rationally, within their set of values and knowledge regarding group norms. Norms therefore provide a 'baseline' for acceptable behavior (or problem-solving).

The development of group norms is a process and requires individuals to develop and learn norms together, not independently or in isolation. This results in behavior that operates from a commonly held baseline of values shared by the individuals in a group, reflected by a collective group membership and identity (Williams et al. 1975:45). The group processing of norms relies on information flow, by storage and transmittal often in an oral format of myths and stories.

In egalitarian societies, conformity is manifested through a social pressure process, which is implemented because there are no formal judicial or legislative positions to police group behavior for conformity. The norms provide a baseline from which group members are expected to operate, and either conform or deviate (Figure 1). The deviations do not necessarily stimulate systemic change, unless they depart far enough from acceptable group behavior. Hoffman's study of the group process and

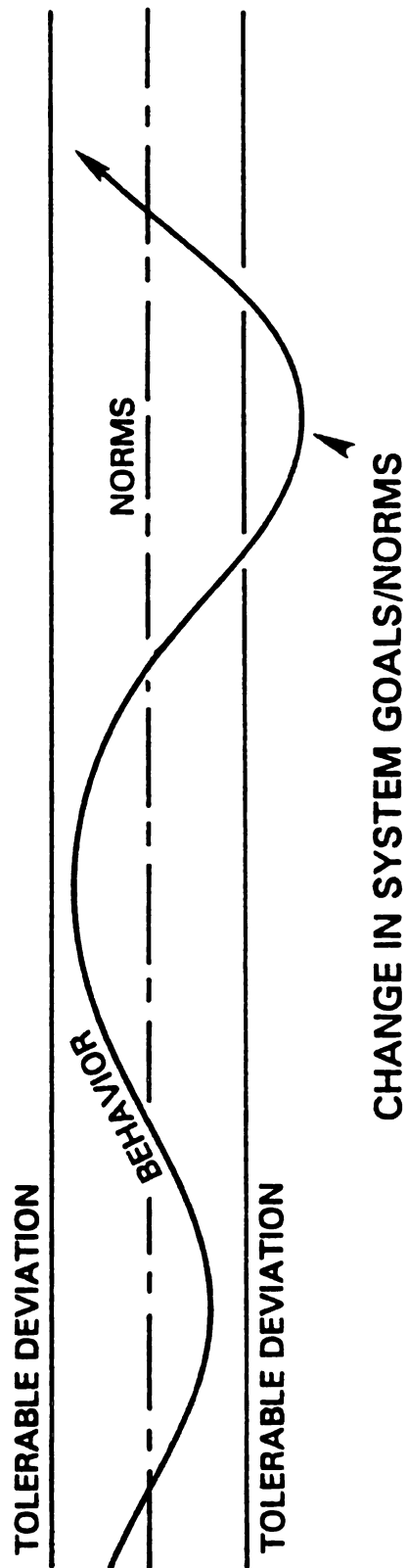


Figure 1: Operation of Complex Egalitarian Culture Systems

influence (1964) suggests that social systems have mechanisms to tolerate a degree of deviant behavior, without resulting in change to the structure of the system. He isolates influential behavior as the major mechanism functioning to maintain deviance within the systems range of toleration. This influence on group behavior operates through norms and group consensus:

... the influential [behavior] so affects consensus that group opinions change to keep up with the changes which ritual factors are causing in activities. It reduces or prevents too much deviance by keeping norms in line with behavior ... [or] ... the influential action so affects consensus that group opinion becomes strong enough to prevent ... deviant activities [1964:184].

### C. Leadership and Communication

A concept which functions to oversee and maintain group conformity, and thus insure some degree of group survivorability, is the group 'leader'. The role of 'leader' in complex egalitarian culture groups is an integral position in decision-making because this level of social organization lacks a hierarchical decision-making process, and a formally sanctioned institution of 'chief', 'headman', or 'bigman'. It is assumed that the group leader functions to assist the group in achieving group goals and maintaining or asserting the collective group identity (Woods 1975). It is also assumed that the leader accomplishes this behavior through communication networks with group members and is manifested primarily as charismatic influence. The leader facilitates the group decision-making process, as a moderator, arbitrator, or

'chairman of the board'. The group 'leader' may be an individual or several influential group members who comprise a council.

Sociological and psychological studies of group leadership have tried to assess what personality types become leaders and what constitutes leaders, focusing on traits, style, situational contexts, and the development of a contingency model of leader effectiveness (Fiedler 1964, 1967). The position of leader is a tenuously held office with a list of attributes that are linked to the group's norms, beliefs, and goals or tasks, although enumeration of these 'qualities' tells us what a leader is, but not why. Ethnohistoric documents relate similar accounts of the qualities of leaders across culture groups: a group leader achieves the position through being a competent hunter, possessing excellent oratory skills, 'intelligence', 'wealth', emotional control, objectivity, and possibly superior status based on kinship and age. Nevertheless, a leader does not have a guaranteed tenure of office, as in the case of ascribed leaders. A group member who excels with these qualities has the opportunity to become a leader, particularly if the current leader is not performing at the group's expectations.

This does not explain the purpose of a leader in the egalitarian system. If everyone is 'equal' in status and wealth, why is the quasi-leader institution to be created or even necessary? This form of leader does not rule through

directives, yet by influence, 'charisma' and by setting a positive example, producing a 'role model'. The leader's ability to influence the group functions in two ways,

although in both of them it does so by acting on the state of consensus. In one the influential action so affects consensus that group opinions change to keep up with the changes which situational factors are causing in activities. It thus reduces or prevents too much deviance by keeping norms in line with behavior. In the other, the influential action so affects consensus that group opinion becomes strong enough to prevent the too frequent performance of situationally probable but deviant activities [Hopkins 1964:184].

It is believed that the group leader plays an integral part in the group decision-making process, particularly in the facilitation of problem solutions, based on shared group goals, norms, and beliefs.

#### VI. Modelling the Decision-Making Process

The processes of decision-making of an egalitarian culture group are complexly organized. The formulation of a model to explain decision-making must therefore simplify these complexities of reality, in order to generate predictions about the process. By extracting the 'noise' or inessential information of a culture system, the relation between relevant variables and problem-solving can be evaluated. The formulation of this model will be based on the concept of isolating general and real elements. Qualitative data will be used to test predictions generated by the model, and no exact fit between predictions and reality is necessarily to be expected. Observations concerning the process may indicate variability between predicted behavior, observed behavior, and reality. This is

the strength of this type of modelling - it allows for the creation of a general framework within which to predict, observe, and explain a culture group's decision-making behavior.

This modelling of decision-making behavior has been undertaken within the guise of a twentieth century capitalistic 'state society' mindset, and thus, the potential biases for the seventeenth century egalitarian perspective must be discussed. Model formation is supposed to provide a simplified view of complex topics. The decision-making processes of indigenous Native American problems certainly fall within the criteria of a complex subject. The model of decision-making, as presented, provides an outline or framework from which to view egalitarian decision-making. Introduction and examination of the data may result in modification and refinement of the model, but this would be a positive outcome of the study.

The delineation of several operating assumptions is directly related to the type of model expounded in this study. It is believed that group norms, goals, rationality, and consensus are part of decision-making and provide the basis for reflective information flow and feedback. The ability of a group to store, process, and transmit information is an integral part of decision-making and, more specifically, relates to feedback processing in a spiral model of problem-solving behavior.



Fisher (1970, 1980), building on the work of Scheidel and Crowell (1964), has posited a spiral model for 'decision emergence' that relies on the fundamental principles of accumulation of knowledge and reflection on that knowledge. Based on Fisher's (1980) communication-oriented discussion of decision-making, a general model is offered from which predictions are generated to explain decision-making behavior of a complex egalitarian culture group in a culture contact context. This model is simple and general enough for use in a variety of decision-making contexts, such as political alliance options with European powers, with the consistent operational element being the study of complex egalitarian culture group decision-making processes.

This model suggests that when a problem<sup>5</sup> is realized, whether stimulated internally or externally to the group, an idea is introduced and evaluated, by individuals who hold membership in a group that shares goals, norms, and thus, problems. Ideas can also be traced to external group sources, and these are stored in the groups' "information bank" for later use. If the idea is accepted (with modification feasible), the ideas' composition is 'anchored' or fixed with the decision-making process. Another goal-oriented idea relating to the problem is introduced, with reflection on to the previous idea to gather knowledge and information for a cumulative-effect for decision-making. This reflection back to the previous discussions about solutions and tentative anchored ideas leads to the

reinforcement and emergence of decisions (Fisher 1980: 142-144).

Thus, it should be noted that the decision-making process consists of more than the introduction of a single idea concerning a problem, with a yes/no response for problem-solving (as is basically maintained in linear-type models). It consists of the introduction of a series of ideas, some acceptable and some not, accumulated to result in the solution(s) to a problem. Figure 2 depicts the spiral, reflecting nature of multiple idea introduction, testing, and accumulation of knowledge.

Each loop within the spiral process follows a circular pattern of decision emergence. Figure 3 schematically illustrates the emergence and anchoring of a decision within the larger spiral model. The process of decision-making, as it is modelled here, initially entails the encounter of a problem by the individuals of a group-type, which then necessitates implementation of the decision-making process in order to solve the problem. The problem is introduced and discussed with tentative ideas and direction sought by the group member(s), within the mechanisms of goals and norms, during an 'orientation' period. This period is characterized by tentative opinions and ambiguity, as attitudes towards the problem are expressed. An idea relating to the problem is introduced (recalling that a single idea rarely if ever results in a solution to a problem).

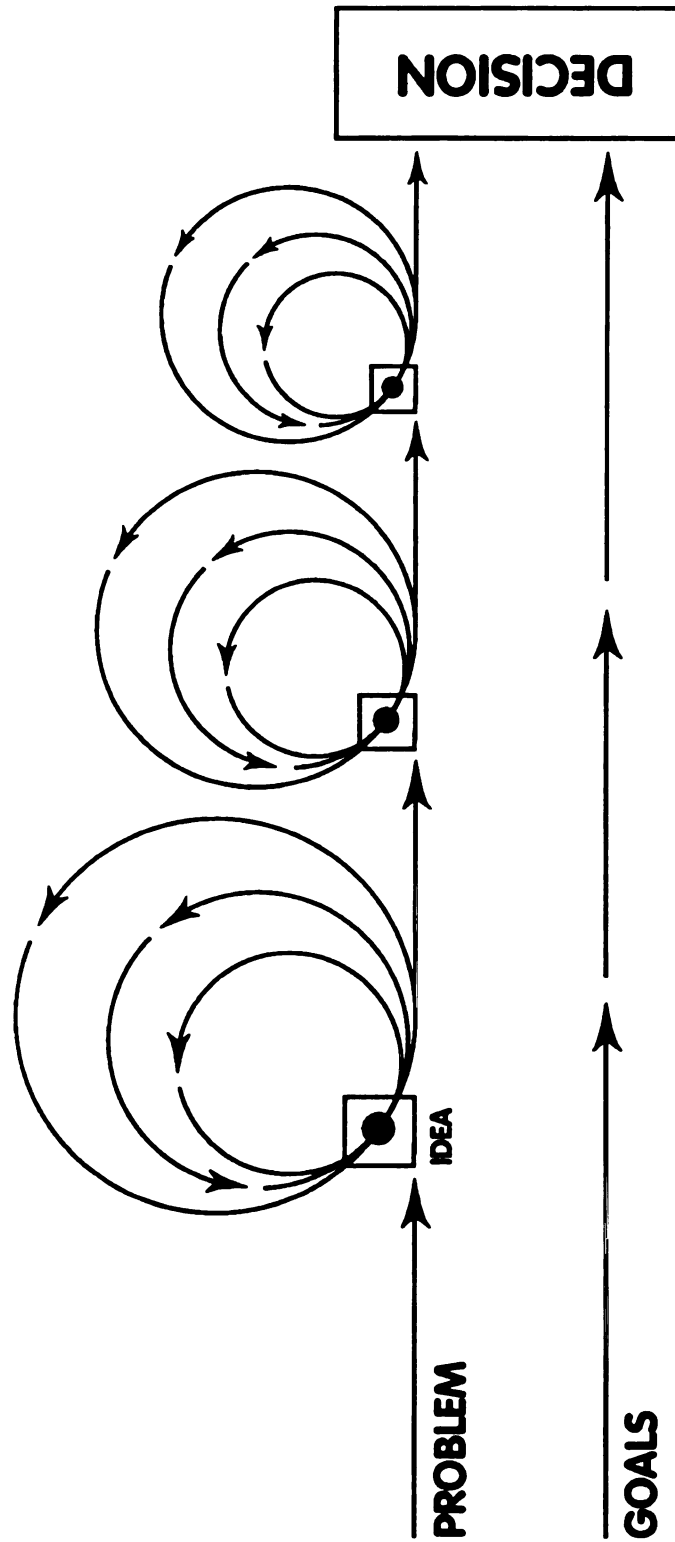


Figure 2: Spiral Model of Decision-Making Processes (after Fisher [1980])

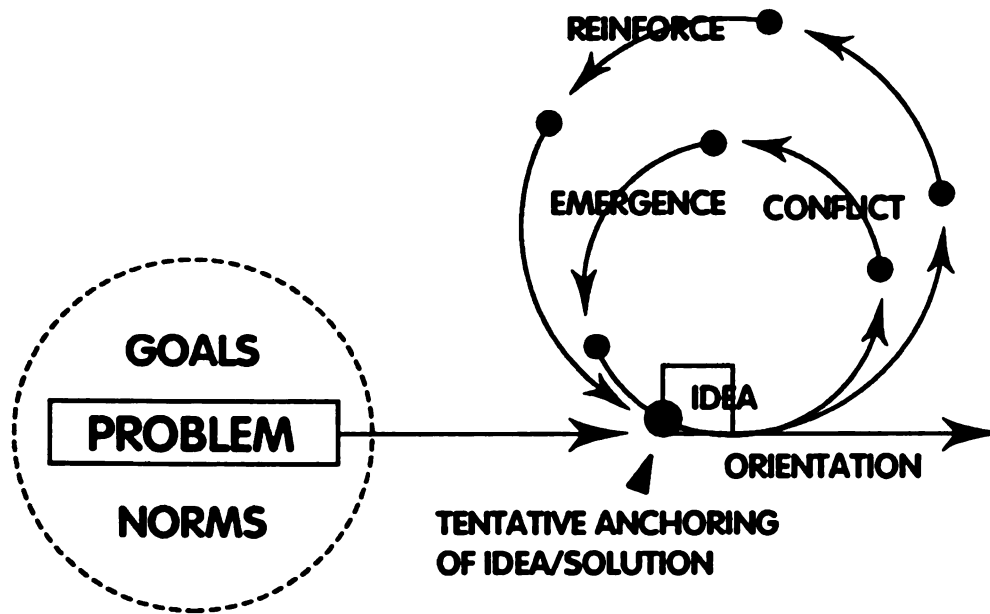


Figure 3: Idea Components of Spiral Decision-Making Process

The idea is discussed and dispute emerges over the idea, during a period of conflict. The role of conflict in decision-making is discussed below. Opinions are expressed concerning the idea, with possible modification. After conflict and discussion, the favorable position about the idea begins to emerge - it is either going to be accepted or rejected. During this decision emergence period, the dissension of the members who oppose the idea begins to fade. Those who were in conflict are cooperating, which leads to reinforcement of the decision and consensus. The agreement over the idea leads to its characteristics being 'anchored' or fixed within the decision-making process. This process is repeated as often as necessary to culminate in a final decision or solution related to the problem at hand. Thus, in the next loop of the spiral model, another idea is then introduced, offered towards the solution of the same problem, reflecting on accumulated knowledge and so on. The process of information flow within each spiral loop is everpresent in the decision-making process.

The term 'conflict' has an onerous connotation for the decision-making process. It conjures up images of group dissension, tension, dispute, and a general lack of progress. Investigators of the group problem-solving process have observed behavior explicitly opposite of this expectation (cf. Tilley 1981). There is a positive dimension to conflict within idea discussion, in that conflict can stimulate creativity and innovation relating to

existing norms and beliefs. Tilley succinctly summarizes the role of conflict in the decision-making process: "Tensions and conflicts lead to negotiated decisions, thus creating new systemic structure and organization. The system, in effect, changes in order to remain stable and permit its own reproduction" (1981:367).

Conflict within the group decision-making process also leads directly to consensus, owing to "increased involvement of group members with their task performance" (Fisher 1980:238). Group members tend to concentrate more effort on ideas and issues they 'believe' in, and thus, expend effort to persuade other members to agree with their solution. This conflict can lead to the introduction of more ideas (creativity) and problem-solving alternatives. The net result of this could be (1) more carefully evaluated decisions, and thus, (2) improved quality of decisions. Conflict will therefore be considered a viable and valuable stimulus to critical thinking in the decision-making process.

In sum, group members reach decision consensus based on an interactive pattern whereby they communicate, share information, "modify, reject, accept, or combine previously introduced decision proposals" (Fisher 1980:150). Thus, decisions emerge from interaction of individuals and leader facilitation, within the group process, as a gradual and cumulative process: there is no single point in time when a decision is necessarily 'made'.

## VII. Expectations Related to Decision-Making and Behavior

The following set of expectations has been generated from the model of decision-making, and in the first section relates to economic considerations. These predictions relate to the decisions processed through the cultural system, and not the processes themselves. Therefore, the actual processing of information through the model using ethnohistorical and archaeological data from the Tionontate Huron remains to be addressed in the ensuing chapters. Inserting this information into the model will allow us to see if the predicted decisions reflect reality. If they do not approximate expectations, the modelling of the processes should allow for isolation and discussion of variance from predictions.

### A. Ideological Subsystem

Cosmology underlies the entire culture system of egalitarian Native American groups - every item, animate or inanimate, is fraught with its own spiritual power. Actions are to be undertaken in balance with the natural world within which Native Americans live. The system did not operate whereby Native Americans appease the spirit world with offerings; rather, they live in balance with nature. This is evident in the manner in which Native American groups give offerings of thanks when they remove something from the natural world, whether stone for chipping tools, animals for food and clothing, or plants for medicinal purposes. The fragile and tenuous nature of the ideological

subsystem is evident when considering changing the role of single object. Ethnographic analysis has recorded the deliterious impact of substituting iron axes for stone axes within a simple egalitarian culture group in Australia (Sharp 1969). The ramifications of this simple exchange resulted in the demise of the social and ideological structure, although it had no profound impact on technology or economics. Decisions may seem simple and straightforward, with unforeseen implications for sustaining the culture system.

Ideology also acts as a social binder between people - the ideological norms and beliefs serve to link kin networks through life cycle events, curing or cursing ceremonies, hunting magic, dreams or vision quests, burial rituals, and mythology. The flow of ideological information between the generations is undertaken through myth or story telling. North American Native Americans had no form of writing; hence, traditions and legends were transmitted within the group orally<sup>6</sup>. The shaman or medicine man served as an ideological catalyst, offering cosmological guidance and expertise to group members to assist them through the spiritual and natural world around them.

Predictions concerning Native American ideological decisions with contact revolve around the general context of conversion to Christianity. The loss of traditional cosmology is thought to have occurred along the lines of an inevitable and nearly uncontrollable culture change



trajectory, at a rapid and irreversible rate. If we assume that goals and norms are mutable (but within tolerable and recognizable limits), the decision-making processes behind "conversion", and thus the meaning or reality of conversion, should provide enlightenment on the change of ideological processes with culture contact.

- (1) The decision to "convert" to Christianity was based on a perceived conception of the superiority of that system and the goal to acquire superior power.
- (2) The decision to incorporate Christian elements into native cosmology involved analogous concepts and did not alter the culture system.
- (3) For the first few decades of contact, the Jesuit impact on native cosmology was minimal due to the low density of missionaries and linguistic barriers. The Native American decision to allow Jesuits to remain was based on the desire to participate in trade and fictive kin notions.
- (4) With the decision to convert, burial practices were altered to reflect Christian ethics.
- (5) Decisions to convert: Christian ethics are viewed as analogous to native ethics.
- (6) With large number of deaths due to disease and warfare in the 1630s and 1640s, native groups concept of baptism and going to Heaven resulted in decision to be together at another place where 'peace reigned'.

- (7) With 'conversion' in the Christian sense, we should see concurrent decisions to totally abandon and alter dreams, life cycle, hunting, warfare rituals, mortuary practices. How could these people safely cross the landscape? They must have made decisions to incorporate 'God' as a powerful 'Manitou'.
- (8) Epidemics and vengeful spirits, missionaries supercede shamans in power - not explanations of conversion, but decisions related to means of justifying the incorporation of new elements, and altering or discontinuation of old.
- (9) Decision to alter lifestyle to avoid sin - but continuation of sin noted with repentance a satisfying option.
- (10) Decision to acquire wealth leads to status differentiation and decision to reflect change in mortuary behavior and signal new ranks and power of individuals.

#### B. Technological Subsystem

Expectations relating to technological concerns and decision-making fall within a material culture context. Specific information about the material culture record is found in archaeological contexts, and in conjunction with historical documents presents the opportunity to investigate specific details of decision-making. Towards this end, the material culture record, from an archaeological perspective, can be quite sensitive to the reflection of decision-making

behavior and changes in technology. In turn, change in technology has the potential of transmitting messages to dislocate the remainder of the system.

Decisions were made by Native American groups concerning a variety of economic factors relating to the technological subsystem: trade networks and options, subsistence regime, resource scheduling and mobility, seasonal round, resource procurement strategies (relates closely to technology), energy expenditure, environmental constraints, reciprocity and exchange (relates to kin networks and obligations of the sociological subsystem), and division of labor. These considerations, as well as others, are bound together by information flow and feedback, risk aversion, scarcity and security concerns, and satisfying behaviors. These factors also provide contexts for decision-making processes, particularly the general format of the precontact Native American gift-giving institution, which is thought to have evolved into a market economy soon after European contact (cf. White 1983; Bradley 1987).

- (1) Assuming that material culture channels and transmits human energy, then new technology will be adopted into the existing technological system to conserve labor, harness more energy, and/or reduce expenditures of effort.
- (2) Technological diversity reflects the diversity of the problems, goals, options, and solutions available.

- (3) A set of tools reflects the solution(s) to problem(s) peculiar to a specific context, and satisfies group goals.
- (4) Changes in technology reflect choices available and have implications for assuring procurement reliability and efficiency.
- (5) Assuming that material culture is the least resistant culture component to change and that culture values and norms define the role of material culture, then material culture values can change within the technological subsystem as goals change.
- (6) Technological/material culture components that symbolize collective group identity are resistant to change, because decisions to change related goals would be detrimental to the system integrity.
- (7) The decision to accumulate material wealth leads to change in the social structure and the creation of status/ranking. The ramifications of this lead to change in the leadership role and group expectations.
- (8) The decision to introduce new material culture into the technological system is implemented by giving new meanings or changing existing meanings.
- (9) The decision to acquire new goods (i.e., trade items) supercedes all other group goals and decisions concerning maintenance of the integrity of the traditional technological subsystem.

- (10) Concerning material culture symbolism: decisions are made to create new roles, redefine existing ones, and deny the existence of others, with the group's goals and norms.
- (11) Decisions to use material culture as a boundary-maintenance mechanism become more visible during contact. The artifact categories to perform this changed as well (e.g., fired-clay ceramic manufacture ceased, and fired-clay pipes fluoresced).
- (12) Individuals were capable of making decisions regarding material culture choices, towards individual goals and preferences. Options available were to add, substitute, modify, or reject European items. Eventually, the decisions to change the material culture assemblage at the individual level results in a change in the composition of a culture group's technological subsystem, which affects the operation of the rest of the system.
- (13) With contact and the increased availability of subsistence resources found at one locale (i.e., a trading post with flour, sugar, etc.), the decision is made to utilize this opportunity in lieu of traditional food resources.
- (14) With dependency on European economics, the decision is made to cease traditional seasonal round, mobility, resource procurement.

- (15) Decisions to rely on European trade goods results in capitalistic market orientation: change from group level nonprofit reciprocal exchange as social binding agent to individualistic profit-oriented enterprise.
- (16) Introduction of trade goods and decisions to replace traditional items leads to decisions to intensify traditional practices.
- (17) Collective communication and information flow result in decisions of energy and matter efficiency for some trade items as opposed to traditional items.

C. Sociological Subsystem

Sociological considerations operating within the decision-making process can be coalesced under the general context of the entire system's structure. The facetious question can be raised: Would a group knowingly and rationally proceed with decisions to alter the social system to such a degree that anomie is the swift and eventual outcome? Or, were Native American groups actually passive participants in culture contact, incapable of making decisions concerning their future?

Within the sociological context, decisions could be made concerning marriage and residence rules, kinship networks, leadership, councils, egalitarianism, and the basic cultural operating set of the group's norms, beliefs, and shared values. Trade and economic decisions had ramifications for change in reciprocal relations, leadership, and status. If decisions were made to affect

any of these concepts outside of the system's acceptable range of deviance tolerance, serious consequences were in order as changes in the group's goals would have been a prerequisite. Recent studies of culture contact focus on which came first: the technological (or ideological or economic) change or the sociological disintegration? Did the change in technology and subsistence practices of a group result in a change in residence rules? Or did social behavior change concomitant with decisions to change the symbolism of food types? The latter inquiry entails investigation of decision-making processes based on norms, goals, and information, whereas the former inquiry denotes a nonexplanatory cause/effect relationship.

The generation of predictions concerning the sociological subsystem are confounded by the research goal of this study: to isolate types and contexts of decision-making processes in a complex egalitarian social system. If decisions are processed to alter this system, new or different group goals have been formulated. This is done because "people decide that the attainment of some new goal will bring improved benefits, and so engage in the observed new behavior because it constitutes the least costly (i.e., most rational) means to realise the goal" (Riches 1982:174).

(1) By changing the social pattern, the indigenous group's goal was to become more Europeanized and decisions were organized to pursue this new goal.

- (2) Changes in social norms, beliefs, and values were necessary with the decision to change social order.
- (3) Decisions to alter the indigenous social order, such as residence rules, marriage patterns, burial practices, were consciously implemented in an effort to gain access to the fur trade system.
- (4) Decisions to alter the social system stimulates alteration of processes of information flow, and thus, results in change in curation of lore, myths, knowledge. This affects decision-making processes.
- (5) Decisions to participate on equal terms in market economy results in decision to acquire wealth.
- (6) The decision(s) to participate in a market economy results in the decision(s) to cease reciprocal kin networks and related behavior, which operated to insure survival.
- (7) Decisions to participate in market economy results in rise of unequal property owners and entrepreneurs.
- (8) Rise of wealthy strata leads to prestigious members with different manifestations of influence and power.
- (9) Decision to participate in European trade results in the incorporation of capitalistic criteria into existing structure - gift-giving, fictive kin, reciprocity and obligations, dispersal of 'wealth' through kin networks.



- (10) The decision making structure, and thus the process itself, should eventually change if the culture/social system has changed.
- (11) The decision to acquire material wealth actually acts as securing the leader's prestige and performance in the system - the leader's success is ultimately of benefit to the group, and material wealth can thus advance the group's security.
- (12) The flexibility of the egalitarian culture system allows for achieved status roles, and with the fur trade and the ensuing possibility of acquiring more material wealth, authority, prestige, and influence are more fully expressed by group members.

#### VIII. Concluding Comments

The delineation of decisions within subsystems underscores the arbitrary nature of dividing a system into parts. There are noticeable overlaps in the treatment of some topics: reciprocal relations are to be found in kin behavior (sociology), trade (technology), and burial practices (ideology). In particular, economic considerations cannot be isolated as a separate subsystem because of the role economic aspects play throughout the system: trade (economics) relates to gift-giving (sociology), material culture (technology), and can reflect honor through grave good inclusions (ideology). Thus, economic information cross cuts the other subsystems and

ties them together and serves as the decision-making set and linkage throughout the system as a whole.

## Endnotes: Chapter 3

<sup>1</sup> The rate at which anthropologists and archaeologists are reaching to decision-making theory to explain change in the 1980s is reminiscent of the surge in studies borrowing from general systems theory in the 1970s.

<sup>2</sup> Martense (1972:267-268) suggests the same is basically true of a dyad, which is not to be considered a group. A 'group' of two individuals is a "highly unstable, tension-producing form of interchange. It is unstable because everything depends on the continuous reactions of only one person - either A or B." Either dyad member can stop communication and the dyad tends to evolve into a dominant/submissive system (Fisher 1980:26). Membership in a dyad does not necessarily manifest the same characteristics of membership in a group, particularly the sense of belonging and responsibility to the group and its goals.

The prehistoric archaeological record of the Huron indicates that villages would reach optimal populations, and faction into two smaller villages. This occurred in part due to depletion of soil nutrients for agricultural purposes and lack of locally available wood supply for building and firewood (Heidenreich 1971). The Feast of the Dead festival served to unite the culture group socially and symbolized the unity of the group, even if a village was in the process of splitting (Tooker 1964).

<sup>3</sup> Majority vote rules or a democracy, in theory, and not taking into consideration the phenomenon of the U.S.A. electoral college, where a majority of votes does not assure victory or real representation, but the 'popular vote'.

<sup>4</sup> See Fisher (1980:22-24) on the concept of a leaderless group and decision-making.

<sup>5</sup> The term 'problem' unnecessarily portends a negative connotation. A 'problem' is generally thought to have a deleterious effect on a system if it is not properly dealt with. For the purposes of this study, a 'problem' can be a positive or negative situation and is used to denote a culture context that requires that a decision be formulated.

<sup>6</sup> A topic for future pursuit is the lack of written record of Native Americans based on European standards. But the native American groups, such as Algonkians and Iroquoians, were capable of signifying collective group identity through material culture symbolism. They also possess artistic and cartographic skills.

CHAPTER 4:  
The Tionontate Huron of the Upper Great Lakes:  
Applying the Model of Decision-Making

I. Introductory Comments

The preceding chapter presented operating parameters for the model of decision-making processes, with ensuing subsystem expectations, for further elaboration and evaluation. This chapter will provide succinct treatment of data format and presentation, qualifications of data sources, and a specific commentary on Huron subsystem expectations. Exposition of expectation contexts will be set forth based on an integral aspect of decision-making processes; that is, the decision-making structure or organization of the Huron cultural system. The structure for decision-making processes includes the leader position (captains or chiefs) at an individual level, allowing for influence and the facilitation of decision-making processes at more complex organizational levels such as war, peace or village councils, clans, or even 'nationally'.

It is felt that the long and fairly complete historical and archaeological record of the Huron provides a cultural profile conducive to implementation of the reflective nature of this decision-making model. The accumulation of knowledge and flow of information, integral components of decision-making processes, must be assessed diachronically.

A synchronic perspective would certainly limit the applicability and validity of this model.

## II. Source Material

### A. Historic Documents

It is felt that a brief delineation of the types, quality and quantity of source material utilized in this study is required, in order to qualify the data derived from this variable body of historic documentation and archaeological investigations. Over 100 volumes of primary historic documents have been searched for explicit information regarding decision-making and culture contact. Several hundred direct quotes from first-hand observations by military and government personnel, explorers, and missionaries are available. Herein lies the problematic nature with much of this material. There are inherent and unavoidable, though reconcilable, biases in the documents<sup>1</sup>.

The vast majority of the documents relating to the Huron are recorded by members of various religious sects, each with a specific rationale for recordation of Native American practices. For instance, the majority of the North American Jesuit letters sent to France focus primarily on extolling the virtues of the 'good neophytes' whom they were baptizing and converting by the thousands (who were usually near the point of death). The motivation of the Jesuits to emphasize conversion successes was to solicit funds to support their missionary efforts, all the while living in deplorable conditions with less than amiable interactions

with most Native American groups. Several Jesuits appear to be more 'heavy-handed' in their treatment of the success of converting natives, particularly Chaumonot and Marquette. Both missionaries rarely provide insights into the indigenous culture group, but rather provide laudatory approval with regard to acts of individual conversion<sup>2</sup>. Often, the religious motivations for attacking native institutions lies in the fact that Native American behavior was seen to be analogous to inappropriate French behavior, such as bacchanales or carnival orgies (Walsh 1982).

Carheil, at the opposite end of the spectrum, was an active instigator of Native American dissension against the French military in the early eighteenth century, carefully recording his case against military infractions and personnel<sup>3</sup>. Other religious personnel, including Sagard and Potier, recorded events from a quasi-secular perspective, preserving in written form accounts of Native American cosmology, creation myths, subsistence, life-cycle, and political organization. This latter body of ethnohistoric documentation, or quasi-ethnography, lends itself to the least biased and most balanced view of Native American lifeways, providing the opportunity to assess change and continuity, through time and the decision-making processes which guided cultural adaptation.

The journals recorded by seventeenth and eighteenth century explorers suffer from their own peculiar manner of bias. Many of these documents depict the undaunted

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exploratory journeys of hearty Frenchmen through the untamed, untraversed wilderness of New France. There is undoubtedly a degree of embellishment and elaboration when one considers the impetus for the writing and publication of these narratives. That is, to sell them for profit to those folk in France who were curious about the adventures to be encountered in New France. The funds generated from the sale of books could then be reinvested into further explorations.

La Hontan's Travels to North America (Thwaites 1905) is one example of this form of 'creative writing' for a particular audience. This is evident through his vituperative attack on French mores and the Christian ethic, two arenas of European culture La Hontan was not partisan to due to what he considered to be injustices inflicted upon him by the French government. Presenting what is most likely a fictionalized rendition of a conversation with a real Huron chief, La Hontan proceeds to lay open the evils of the French political and religious systems. This would certainly have made for interesting reading in the early 1700s. One of the strong observational aspects found in the explorer journals is the attention paid to details of daily Huron activities, often found to be missing in the religious journals. As a category, the explorer documents are much more attuned to observing the Huron as a group of people whom they came in contact with, as opposed to the



missionaries, whose tendency was to record events, and not people.

The third major source for the documentation of Huron activities during the first 150 years of contact comes from the reports, letters, and personal diaries of French military personnel (Margry 1876; MPHC 1903-1904; Adams 1961; Quaife 1962). This set of documents reveals details of governmental policy and campaigns, as well as insights into individual officers' profit motivation for participation in the fur trade (Biggar 1922-1936; MPHC 1903-1904; Quaife 1962). Although details of individuals or social events are generally lacking in these records, there is significant information regarding the political climate of the period. For instance, the 1690-1710 on-going feud between the Jesuits at Missilimackinac and the military personnel (primarily Cadillac) at Fort Pontchartrain, is revealed through a series of letters (MPHC 1903-1904). These documents shed light onto the prevailing atmosphere of the era and the options and attitudes available to Native American groups, in particular the Huron, who were in the middle of these religious-political maneuvers.

In contrast to ethnographic studies, executed by social or cultural anthropologists, ethnohistoric sources are limited in their anthropological detail, scope, and method of data collection. Ethnohistoric data has generally been gathered through direct observation of indigenous groups, but without the guidance of a problem or research

orientation, theoretical foundation, or methodology for unbiased information collection by an untrained observer. Therefore, the data in ethnohistoric documents must always be viewed with consideration of the inherent biases of the data collector. The cultural, social, and political character of the recorder must be considered, since these values can position the recorder's observations. An ethnographic study may focus specifically on gathering information about decision-making processes of a group (cf. William 1977; Wharton 1971). Ethnohistoric studies, however, provide a wide gamut of information from which decision-making processes may or may not be gleaned. Nevertheless, if the differences and limitations of the latter data set are kept in mind, critical and valuable conclusions can be drawn and supported from the documents.

#### B. Archaeological Information

The quality and quantity of data available from archaeological investigations of precontact and contact period Huron sites is immensely variable (Wintemberg 1946; Kidd 1953; Jury and Jury 1955; Wright 1974; Finlayson 1985)<sup>4</sup>. This is due primarily to the differing levels of effort implemented for data recovery: from avocational collection and/or excavation, to different field and analysis methodologies employed over time by professional archaeologists. The encumbrances on the data quality relate most directly to questions specifically concerning material culture and technology. General trends and patterns in

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culture group behavior are nevertheless accessible and discernible from the data (cf. MacNeish 1952; Wright 1966; Heidenreich 1971).

One fundamental trend concerning the Huron is aptly supported by archaeological evidence. For at least 600 years prior to contact with Europeans, the ancestors of the Huron were implementing a series of decisions that resulted in adaptation and change. Change is apparent long before the arrival of Champlain, in most cultural subsystem components: village configuration, settlement, material culture, technology, and symbolic manifestations (Wright 1966; Ramsden 1977; Kapches 1979; Dodd 1984). This is an important criteria for the later discussion of change, adaptation, and decision-making. Suffice it to say at this point that archaeologically-derived data concerning the Huron will lend itself to the addressing of questions concerning decision-making and general trends of material culture and technological change and/or adaptation. The data does not readily afford the opportunity for quantification for the purposes of this study, such as inter-site comparative analyses. The validity of quantifying the material culture as an expression of change will also be discussed.

### III. Subsystem Expectations

Investigation of historic documents germane to Huron decision-making reveals that three distinct categories of data are available for study. Information to be gleaned

from historic sources includes material pertinent to: (1) the structure or framework of decision-making [organization], (2) operational aspects of decision-making [expectation contexts], and (3) processing decisions [implementation]. This next section will outline the organization of Huron decision-making, summarizing relevant historic entries. This will provide the structural setting, or backdrop, from which the following section can treat the expectations and processes of decision-making.

#### IV. Organizational Considerations of Decision-Making

Historic documents provide information about the Huron 'governmental' institution, and these documents record details which remain fairly consistent over the period from 1600 to 1750. We find from the documents that throughout the period 1600 to 1750, the Huron are comprised of three main 'nations', each with a leader alternately referred to as the chief, captain, stay-at-home, or big-stone (Wrong 1939:91; JR 10:233; JR 15:39; JR 43:191; JR 61:115; WHC 17:238; Shea 1962 (2):9, 22; MPHIC 1904:183). From the point of initial contact through the nineteenth century, it is recorded that there are at least eight clans, each with a clan leader (JR 33:243, 247; JR 38:283; Potier 1920; Finley 1840; Clarke 1870; Powell 1881; Connelly 1899; Barbeau 1915a, 1915b, 1917; Tooker 1964; Steckley 1982). Each nation is comprised of several villages (multi-clan), each with a village leader (JR 10:229-233; Wrong 1939:149-153). Within a village, there are to be found a variety of types

of council leaders: war councils, feast councils, trade councils, peace councils, each with its own leader (JR 10:281; Wrong 1939:99, 149). Thus, in seventeenth and eighteenth century Huron society, numerous individuals served as leaders of a variety of levels of group organization: nation, village, clan, or council<sup>5</sup>.

The position of 'leader' or 'captain' was acquired by an individual who possessed "intellectual preeminence, eloquence, free expenditure, courage, and wise conduct" (JR 10:231). No type of leader was considered to be of a higher status than other leaders or group members, although some deferential treatment may have been afforded, such as first and best cuts of meat, etc. (Thwaites 1905:579; Shea 1962 (2):25). Suitable leaders were often sought from hereditary lines, through the mother's lineage (i.e., mother's brother's sons), but it was not an automatic appointment: the individual still had to meet the criteria of a leader (Quaife 1962:20-21; JR 10:233; JR 38:265; Shea 1962 (2):23-24). The individual who merited the title of captain led his people by setting a good example to be followed. As Sagard noted, the leaders are "not always obeyed by their soldiers, inasmuch as they themselves are often deficient in good leadership, and he who is a bad leader has often bad followers" (Wrong 1939:151). A decision did not manifest itself as an order or decree, but as a supplication or request, with the leader serving to facilitate a group level decision and its subsequent implementation (JR 15:157).

Sagard, in the 1620s, commented on the manner of a leader's vested power or control over the group:

a chief has no absolute authority among them, although they pay him respect, and the tribe is lead by entreaty, advice, and example rather than commands. ... the old men and headmen ... meet in council with the chief, and there they decide and promulgate everything that concerns their republic, not in the way of an absolute order ... but by entreaties and suggestions ... [Wrong 1939:148-149].

Nearly 100 years later, Charlevoix's observations indicate that the mannerism of leading was virtually unchanged:

These chiefs generally have no great marks of outward respect paid to them, and if they are never disobeyed, it is because they know how to set bounds to their authority. It is true that they request or propose, rather than command; and never exceed the boundaries of that small share of authority with which they are vested [Shea 1962 (2):24].

Cadillac pondered in 1708 "what would [the Huron] not be capable of if they had chiefs with absolute power?" (MPHC 1903:430). Cadillac wanted to form military companies comprised of Huron, but aptly noted that the 'soldiers' would never take orders from their chief (MPHC 1903:430). According to the consistent profile of a leader's 'authority', conclusions by contemporary scholars concerning the desire of leaders to acquire wealth, status, and rank, must be reconsidered (Hayden 1976; Trigger 1981).

The individual leaders were organized into a variety of groups for discussion of problems and creation/consensus of decisions. These groups are most often referred to as 'councils', with each council type having a particular function, whether for feasting, warfare, village concerns, burials, or national interests (Wrong 1939:150; JR 5:245-

249; JR 10:27, 281). There was a special council organized for ascertaining how many men could leave the village to hunt, trade, or engage in raiding parties, so as to leave the villages with an adequate number of warriors for protection (Wrong 1939:99). The actual procedures for holding a council, from calling a meeting and gift giving to actual voting and decision-making, are outlined in several detailed accounts (Wrong 1939:148-151; JR 10:253-257). Once the captains made a decision, a public assembly would be called (JR 10:253). In most cases, it is the older men who are leaders, because they garnish the most respect, due to their empirical knowledge and wisdom (JR 10:15; JR 15:39; JR 16:179-181).

Specifically, in regard to council level decisions, the historic references indicate that captains were given the opportunity to make speeches, in an effort to persuade others to agree with their position (JR 10:257). Thus, oratory skills were vital to being an effective leader. Le Jeune witnessed decision-making at the council level in 1636: "Matters are decided by a plurality of votes, in which the authority of the Captains draws over many to their views; in fact, the usual way to coming to a decision is to say to the Old Men, Do you give advice, you are the Masters" (JR 10:251). The councils offered the opportunity for captains to present their opinions and advice on a subject, ending with "Condayouendi; ierhayde cha nonhwiewahachen:



That is my thought on the subject under Discussion" (JR 10:259).

Charlevoix observed in 1721 that the Huron leaders and councils still functioned for the benefit of the Nation, but often individuals concealed their real intentions to persuade decisions in their favor, for "satiating a revenge which knows no bounds" (Shea 1962 (2):27). He noted that the honorable behavior of the Huron was for the national welfare because "those violent passions, which have so much disgraced the politics even of Christians, have never prevailed amongst the Indians over the public good" (Shea 1962 [2]:26). He also noted that blood feuds could only be discouraged by converting the Huron to Christianity.

With the influence of the Jesuits and 'conversion' of some Huron, an interesting dilemma arose concerning the composition of councils, captains, and decisions. Were decisions to be decided by one faction or the other? An insight into the actual impact of Christianity and decision-making processes is imparted by exploring this issue. Historic accounts reveal that the Huron decided that council organization, with egalitarianism in mind, must be comprised of equal representation of 'infidels' and 'converts' (JR 33:241; JR 38:281).

#### A. Expectation Context: Huron Ideology

The tenets of egalitarianism and reciprocity underlie elements of the ideological subsystem. As mentioned previously, Native American ideology can be encapsulated

under the premise that there is a balance between humans and the natural environment, of which Native Americans are tangentially cognizant. Institutions exist which systematize, explain, and maintain that balance. Thus, the inherent context for ideological decision-making concerns is that decisions entail consideration of human/nature balance, and that alterations of that relationship must be undertaken in a manner such that the balance can be altered, yet maintained (a dynamic equilibrium).

B. Expectation Context: Huron Technology

In terms of technological decision-making, one general theme underlies all specific expectations. That is, decisions were made to create changes in the Native American material culture assemblage upon European contact, and the contexts for decisions were within a culture group's set of shared norms, beliefs, and experiences. It can be assumed that these changes were made related to social, ideological, and economic concerns, as well, and motivated by the desire to make life 'easier' and more secure. To change the technology, the accumulation and processing of information in decision-making would necessarily have to entail decisions regarding group goals and norms. So, although the decision contexts may be isolated within a particular subsystem, the consequences can be felt throughout the entire system. This is not a hierarchical ordering of procedures, but an accumulation of knowledge, amassed to process changes. It remains to be seen whether the Huron

proceeded in such a fashion, and if they did, what was the outgrowth?

C. Expectation Context: Huron Sociology

The identity of culture group members is generally manifested and reflected within the social set of norms, beliefs, and values. Within the Huron society, the set of norms is guided by principles of reciprocity and egalitarianism, and as a whole system, serves to bind together group members socially. Individuals cannot act alone, but must interrelate and interact with the other group members, to insure group, and thus, individual survival. Each individual is like an actor with a vital part to play in the group performance, which is based on social precepts developed to guide each actor's role. Although this becomes a neatly defined operation in theory, the reality of the performances may vary. Towards this end, the social system has a mechanism to deal with aberrations, which is found in its flexible nature, allowing for fluid group membership.

Individuals who do not wish to play their part, as defined by the social 'script', can seek membership and a new role in another (though probably related) group. This factionalization of members is reflected in the precontact archaeological record of the Huron, where large villages would split into two smaller villages (Dodd 1984; Warrick 1984). Movement of individuals within a village may be reflected by the addition to living space on longhouses

(Finlayson 1985). Historic references are also made to members of a group leaving to join another village (Wrong 1939).

The general decision-making expectation pertaining to the social subsystem revolves around the group's norms, which can be accredited with binding together the culture system: all actions and behaviors of the culture group's members are filtered through the set of norms. Therefore, adaptations in the social set require corresponding change in the norm set. Rules of marriage, kin-reckoning, or reciprocity cannot change without an adjustment in the underlying cultural standards that guide, control, and regulate proper and acceptable behavior.

In summary, there are fundamental concepts in which a complex egalitarian culture group, and in this case the Huron, operate decision-making processes. The role, authority, and abilities invested in a leader are integral considerations for the behavior of decision-making at the indigenous group level. Group norms and beliefs guide behavior, and egalitarianism and reciprocity underlie all system parts, weaving them together. Above all else, the accumulation, storage, and transmittal of cultural information within and between subsystems links the system together, suggesting that an alteration in any part may have ensuing affects on other system parts.

## Endnotes: Chapter 4

<sup>1</sup> The use and misuse of documents in ethnohistorical, anthropological, and archaeological research is a subject matter dealt with at length by several authors (Beaudry 1989; Brown 1987; Axtell 1985; Trigger 1987). Some authors deal with the subject of documentary evidence from a methodological perspective (Brown 1987), while others caution readers about the limits of their respective documents, within case specific contexts (Heidenreich 1971:16-19).

<sup>2</sup> It is suggested here that the perspective of individual religious personnel, with regard to their documentation of missionizing efforts, presents a direct reflection of the attitude and interaction of a given missionary. For instance, Chaumonot and Marquette go on at length about numerous, individual baptismal cases. However, they do not discuss the qualities or characteristics of the individual people they are interacting with. It is almost as if the 'good neophytes' are numbers without names, personalities, or cultural traits. These priests do not appear to be careful or critical observers of the human condition, and hence, may not have been very successful at participating in the European-Native American interaction sphere. Thus, it is suggested the lack of attention to the characteristics of members of the culture group being converted leads to the attenuation of the missionaries' accounts, and therefore lessens their applicability to this study. The ethnocentric bias level is highest in this type of missionary recording.

<sup>3</sup> The Carheil-Cadillac debate of the late 1690s through the 1700s was a serious controversy and eventually led to Cadillac's removal from Detroit (MPHC 1902-1904; JR 64, 65). The quest for supreme authority by both interest groups, the Jesuits and the French military, is clearly manifested during this interaction, with the Native American groups caught in a power-play tug-of-war. In some regards, the option to change alliances to the English during this period was quite viable, in that it could have provided a more secure political structure to interact within.

<sup>4</sup> The orientation of research goals relates directly to the usefulness of data derived from archaeological contexts. For instance, Heidenreich's use of the presence/absence of Huron sites to delimit the bounds of historic Huronia is certainly within the realm of the data (1971:48-53). Many statistical manipulations of Huron inter-site material culture assemblages would be suspect, however, due to the incomparable data recovery techniques, hindering cross-site comparison of behavior reflected in a given site's collection.

<sup>5</sup> John Steckley, a self-trained ethnolinguist, has written an intriguing account of three prediaspora Huron men (1981). Using Jesuit letters and dictionaries, Steckley's book, though intended to be historical biography, actually provides three case studies of individual decision-making processes and outcomes.

CHAPTER 5:  
The Ideological Subsystem: Data and Decisions

I.    Introductory Comments

At its most basic premise, the context of the influence of Christianity upon traditional Huron ideology is thought to have been immediately overwhelming, stimulating systemic degradation in only a few generations (Hunter 1985; Trigger 1987). Specifically, native 'conversion' to Christianity is stated to have altered traditional views of the balance of nature/man, regulating institutions, feasts, dreams, and personnel, 'power', mythology, mortuary beliefs, and practices, and thus social binding and cohesion, reciprocity, egalitarianism, and related information flow.

Despite Brown's (1979) study, which concludes that unilinear, unicausal explanations of change are too narrowly focused and do not adequately assess the whole cultural system, recent scholastic endeavors still look towards native conversion to Christianity as the casual factor behind acculturation. 'Conversion' should be treated as a symptom of contact, not the cause of change. It is felt that the assessment of the details of ideologically-related notations in the historic record, through the guise of decision-making, will offer insights into the change and the meaning of 'conversion'.

This chapter will pursue this through the discussion of three general topics, with supporting data gleaned from the historical and archaeological record: (1) the Jesuits and their methods for conversion, problems, and solutions, (2) the Huron and their ideological institutions, problems, and solutions to 'conversion', and, (3) Jesuit and other French discussions of the meaning and reality of native 'conversion', in relation to Huron decision-making.

## II. The Adaptation of Christianity

During the period 1615 to 1632, the religious presence in Huronia was sporadic and sparse, alternating between the disparate doctrines of the Jesuits and Recollets. No Jesuits were even allowed into Tionontate lands until 1640, being forced to leave the following year, with two priests returning in 1648 for two years (JR 33:143). From 1632 to 1650, 18 priests were scattered among 12,000 Huron over 350 square miles (Grant 1984). With the 1650 tripartite dispersal of the Huron, the faction at Lorette was in constant contact with Jesuits, the Tionontate Huron had virtually no contact with religious personnel from 1650 through 1665, and the Iroquoized-Huron along Lake Erie had sporadic Jesuit interaction (Trigger 1987). The Tionontate Huron settled at the mission at St. Esprit around 1665, moving on to the Straits of Mackinac in 1671. Father Marquette founded a mission nearby, and there was a steady Jesuit influence for the next 30 years. By the late 1680s, throughout the remainder of the French regime in the Great



Lakes, the Jesuit role changed gradually to one of political maneuvering, playing native groups against the French military (JR 64:23-29, 36-40; JR 65:189-253; WHC (17):412-415; MPHC 1903:137-145, 158, 194-198, 401-411, 425-452). Once at Detroit, the Jesuit presence was again sporadic, due primarily to Cadillac's dislike of the order. Between 1714 and 1728, no Jesuits were firmly established in Detroit. Father Richardie (1728-1743) and Father Potier (1743-1783) administered religious duties within the three or four Huron enclaves through the end of the French era.

The Jesuit missionaries undertook their efforts to Christianize the Huron through baptismal rites<sup>1</sup>. For the first 40 years of contact, the priests generally baptized those Huron who were on their 'death-bed', although some miraculously recovered and were confirmed 'converts'. The priests also baptized children by sneaking into Huron homes under false pretexts (JR 13:167), by "pretending to feel the vein of his temple in order to ascertain the state of his health. I fortunately sprinkle his soul with the blood of Jesus Christ" (JR 20:65). Besides the near-death conversions, the Jesuits focused their initial conversions on healthy adults, particularly village elders who were knowledgeable and respected and could therefore lead group members to follow by example.

The first recorded healthy adult baptism is not noted until 1637 (JR 14:77-95; Grant 1984; Trigger 1987:548-549). When the Jesuits realized that the elders were too ingrained

with their "superstitions" and infidelity, the priests concentrated their teachings on the children, trying to convert them before they could learn the superstitions of their elders (JR 10:21). Thus, the children could teach their parents (JR 10:23-25). Although we will never know what being baptized meant to the Huron during this period, it is suggested that only a small percentage of the 7000 baptisms recorded by Brebeuf from 1626 through 1649 resulted in true conversion or understanding of Christianity (JR 33:159). In 1648-1649, 2700 baptisms were recorded, though many of these people were killed or adopted by the Iroquois (JR 33:227).

For the first 25 years of contact, the sporadic presence of the Jesuits (or Recollets) resulted in difficulties in overcoming the language barrier. The priests chose to learn the Huron language, but soon realized a major obstacle existed in the lack of Huron terms for Catholic concepts (Wrong 1939:73-74; JR 5:191; JR 10:65, 117; JR 20:21, 71). Once the language barrier was overcome in the late 1630s, the next obstacle to confront the Jesuits was the Huron's insistence on the literal meanings of Catholic dogma. The duality of Heaven, with its rewards, and Hell, with its eternal fire, was not lost on the Huron. It is noted in the 1630s that the Huron perceived the Christian Hell as the place where everyone who had not been baptized lived, in flames forever, which could be likened to

the reality of captive torture in the fires of the Iroquois (Wrong 1939:173; JR 10:15, 29).

The Huron believed that their children, if baptized before death, went to Heaven, and they therefore sought baptism saying that "We do not wish to be separated from our Children, we desire to go to Heaven with them" (JR 10:31). This instance, and others, suggests that the Huron believed Heaven to be another place where they would go to dwell with family and friends after death (JR 22:105; JR 23:61). This view was complimentary to the Huron belief in souls and the land of the souls.

The earliest discussion of the Huron's concepts of death, souls, and afterlife is presented in the journal of the Recollet priest, Sagard (Wrong 1939:172-173). The Huron believed that souls were immortal, with a part of the soul staying near the body till the Feast of the Dead festival, when it could then go along Atiskein anaahatey or the path of the souls. The other part of the souls stayed with the body (JR 10:141-157, 287; JR 39:13; Quaife 1962:43-44). Dogs were believed to have their own path of souls, as was everything else in nature (JR 8:121; JR 10:167). In the next life, souls were believed to need the same things as on earth; that is, food, shelter, tools, and so on. Sagard wrote that

This is why with the bodies of the dead they bury or enclose bread, oil, skins, tomahawks, kettles, and other utensils, in order that the souls of their relatives may not remain poor and needy in the other life for lack of such instruments [Wrong 1939:172].

The souls of all the burials goods also go into the next life (cf. Martin 1975; JR 10:143, 265, 271).

A critical difference between Christian precepts of heaven/hell and native ideology is that the Huron did not distinguish between good and bad when preparing the dead for the land of the souls, "honoring equally the interment of both" (JR 8:121). At the Huron land of souls, everything was thought to go on as before: hunting, fishing, the need for food, axes, and so on. This belief is certainly within the range of thought concerning the 'green pastures' of Christian Heaven, especially when the Jesuits were telling the Huron that they could go to Heaven and live in peace with their relatives if they were good Christians (JR 20:140-173). Fearing the fires of Hell, but also realizing that baptism caused death, some of the Huron opted to shorten their lives, but assure themselves of the passage to Heaven (JR 11:119). As Conkling suggests, the Huron were capable of testing and evaluating options, making adaptation or accommodation decisions based on the efficacy and benefits for the culture system (1974). This testing behavior is represented by the variety of problems, goals, and solutions which faced the indigenous Huron cosmology with European contact. The Huron obviously made decisions based on stored information, processing decisions along goal-oriented guidelines.

Myths and stories were used to teach young Huron about how to get to the land of the souls, similar to biblical

tales of getting through the 'pearly gates' of Heaven (JR 10:149-157). Herein lies the fundamental understanding and processing of Christian concepts: Heaven could be likened to the Huron land of the souls, and Hell likened to the known reality of Iroquois torture fires. This information was processed and incorporated because Heaven/Hell could be rationalized into existing beliefs and norms (Figures 4-5). Thus, individual decisions to 'convert' were based on knowledge of the existing belief system and the adaptability of incorporating similar, yet new, elements. The incorporation of new elements, in this case the fires of Hell, was feasible because the Huron thought the Jesuits were Oki, or the Huron version of supreme and powerful deities. The Jesuit-Oki were thought to be more powerful and knowledgeable because they could perform miraculous cures, predict eclipses, and 'magical' acts (JR 62:199-201).

In other cases, some Huron did not wish to go to Heaven, with reasons such as they would know no one there (insinuating that all of their friends and relatives were Hell-bound), the French would give them nothing to eat, the Iroquois would be there and they would have to fight them, there would be no fields, no trading, no fishing, and no marriages (JR 13:167, 179). Thus, some Huron were capable of distinguishing subtle differences between their land of the souls and the Christian Heaven, choosing to not go where they would be unhappy.

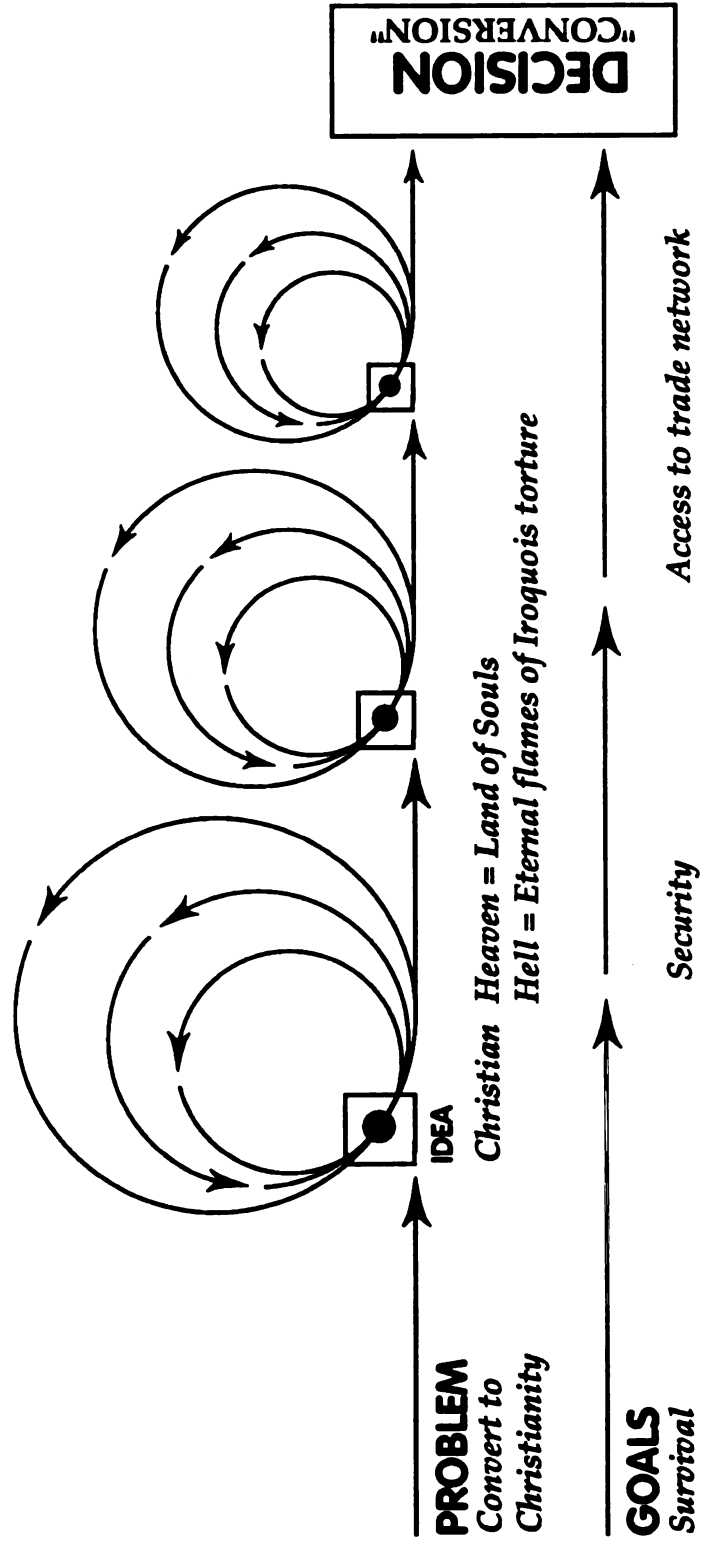


Figure 4: Decision-Making Process for Conversion

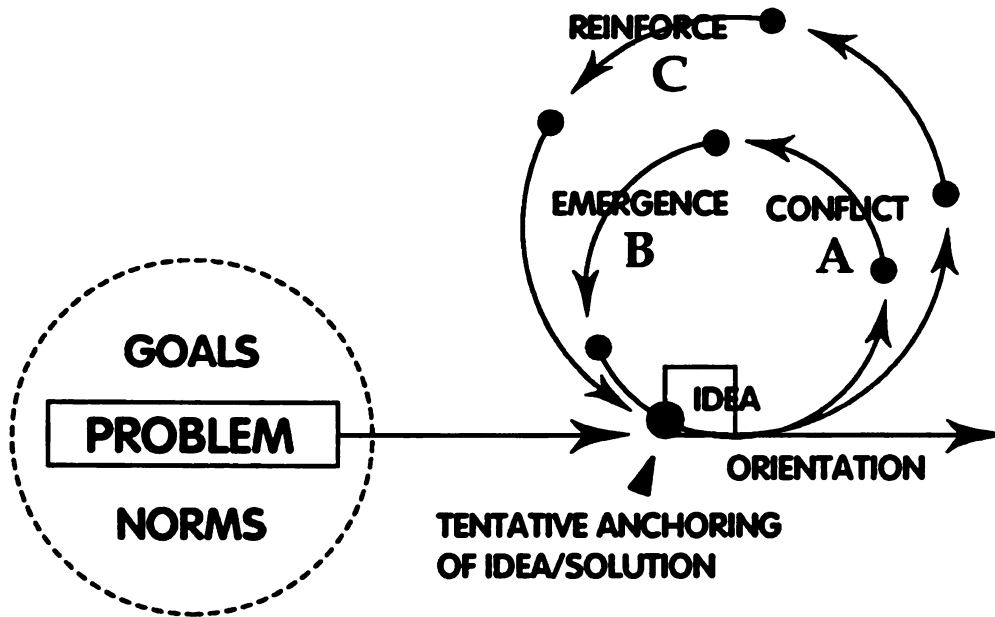


Figure 5: Idea Components of Ideology Decision-Making Process

1. {
  - A. Iroquois could also be baptized and in Heaven
  - B. Huron will be in constant fear of Iroquois
  - C. Heaven must be avoided — too dangerous
  
2. {
  - A. Children have been baptized and are in Heaven
  - B. Want to be with children
  - C. Heaven is the place to go
  
3. {
  - A. Baptism brought death, thus Heaven
  - B. Good things in Heaven: family, friends
  - C. Heaven is the place to go
  
4. {
  - A. In Hell, will burn in eternal flames
  - B. Likened to Iroquois tortures
  - C. Avoid at all costs

One particular instance of literal translation of Christian principles bears presentation as an example of the nearly insurmountable task the Jesuits had to deal with. In 1636, a 'Christian' Huron called Louys was told the biblical parable of "the burning of five wicked cities, and the preservation of Lot and his family, to show how God chastises severely even in this life the wicked and the vile, and how he saves the good" (JR 10:65). Louys took this information to his relatives and told them that if they became Christians, God would keep their cabin from being burned, even if the whole village was set on fire (JR 10:65).

Catholic prayers should be treated as analogous to Huron dreams, but more powerful, according to native thought. Long before the arrival of the Jesuits, the Huron shamans would have performed ceremonies to request rain from the Sky-god, with appropriate dances and offerings. The Jesuit priests also enlisted the assistance of the Christian God to make it rain (JR 10:41), and were sometimes 'successful'. Thus, the Huron, thinking that the Jesuits' prayers were more powerful, would ask the priests to pray for rain or to cure the sick, promising fidelity and denouncement of traditional gods in return (Wrong 1939:173; JR 10:43; JR 11:111). This appears to be rational reasoning, utilizing existing information about gods, power and ways to grant desires.



On one occasion, a council of Huron elders took up a village-wide collection for corn to give it to Sagard, so that the priest would "Pray to Him ... to make the rain cease ..." (Wrong 1939:179). The Huron felt that their thunderbird gods were too frightened of the Jesuit's cross, because the "red color with which it was painted was like a fire burning and flaming, which divided the clouds in two when they passed above it" (JR 10:45). The Huron would indulge in prayer themselves, especially before hunting or crossing a lake (JR 26:209). Decisions to invoke spiritual aid, through dreams and offerings, before undertaking arduous tasks was a common Huron behavior long before the onslaught of Christianity (JR 27:209; JR 25:127). After praying to God for a successful hunt and upon success in slaying a moose, the Huron hunter offered the best portion to God (JR 24:127; JR 23:175).

A lack of understanding of the power of the Christian faith is evidenced by the Huron requesting baptism as a means to safeguard against epidemics (JR 10:13; JR 11:118-119). Seeing that the Jesuits did not get ill, the Huron initial rationalization of this situation and decision that the Christian God protected 'his children' seems logical given these circumstances (JR 8:149). After the massive population devastations of the 1636-1637 epidemics, the Huron became wary of the Jesuits and decided they were agents of the devil and causing disease, both in person and through using trade goods as charms (JR 12:87). In other

instances, rosaries were used as charms for protection against illness, the Huron assuming that this necklace was what gave protection to the Jesuits (JR 20:181). For several years, the Jesuits' influence and progress was lost and their safety in question as the Huron even went so far as to cast away copper kettles and other trade goods in retaliation (JR 12:87-89, 237-239; JR 17:97; JR 19:183, 211-213, 233; JR 35:165-169). Dreams of the Jesuits being demons and bringing disease instigated traditional dances and ceremonies to be held (JR 20:29).

An illustrative example of Huron decision-making is found in a story told in 1640 (JR 19:95-99). The Huron, in an effort to deal with disease and epidemics, relied on their long-standing knowledge of the behavior of evil spirits, information flow, and the power of myths. The Huron incorporated the Jesuits into myths to explain their predicament, thus trying to bring rationalization to an unusual phenomenon. The fable relates that the Jesuits, as powerful evil spirits, had a place in their house where they kept a toad marked with pits (re: small pox marks), with which to cast their spells (JR 19:97). In 1646, Rageneau heard a set of Huron myths which had been created to denounce Heaven. A Christian Huron woman, who had been buried in a Jesuit cemetery, reportedly returned from Heaven to warn her friends that she had been tricked, and was burned like an Iroquois captive in Heaven (JR 30:25-31). Many Christians believed this tale, and thought the Jesuits

were demons who had crossed the 'great sea' just to steal the Huron's souls for torture.

One of the several analogous concepts which the Jesuits used to their advantage was the Christian God and Huron Oki (JR 5:257-259; JR 8:111; JR 23:175; JR 25:125; Shea 1962 (2):16, 143-148; Wrong 1939:170). Jesuit fathers were sometimes called Oki because the Huron revered their vast knowledge and power (JR 12:87; Shea 1880:260). A similar parallel between powerful and charismatic indigenous Micmac spirits and Jesuits has been noted by Conkling (1974). Incorporation of power through addition of new deities is discussed by Bradley (1986), Hammel (1983), and Miller and Hammel (1986), who conclude that native groups purposively added European 'gods' into their systems to acquire new and potentially stronger power.

The Huron spirit structure consisted of a set of types of gods. At the top are the Oki, gods or spirits who rule over everything good and evil. A set of 'lesser' deities were to be found guarding rivers, warfare, feasts, trading, and so on (JR 10:183). The concept of the Christian God either being equivalent to Oki, or a desirable addition to the power structure, is within the realm of Huron philosophy. An explicit discussion of this subject was recorded in 1636:

... it is really God that they [Huron] honor ... for they imagine in the Heavens an Oki ... [a] power which rules the seasons of the year, which holds in check the winds and the waves of the sea, which can render favorable the course of their voyages ... " [JR 10:161].

Oki, from his sky-vantage, saw all that the Huron did, and they tried not to anger him, or draughts were thought to occur, or someone caused to drown. The displeasure of the sky-Oki could be remedied with offerings and feasts (JR 10:163). The Christian God, also located in the sky, had similarities to Oki, and decisions to either incorporate a new, more powerful god, or replace Oki altogether, are in keeping with the fluidity of Huron cosmology.

When a traditional curing ceremony failed in 1721, the Huron blamed the Jesuits, who did not attend, telling them that "ever since their arrival in the country, the genii of the Indians had no longer any power" (Shea 1962 (2):16). The Huron added that the Jesuits had their gods, and the Huron theirs, although the Huron admitted the misfortune of having the less powerful of the two (Shea 1962 (2):16). The historical record indicates that some individuals used their understanding of the situation to incorporate 'powerful' Christian God and behave according to the associated rules. The new set of rules was not always enacted, though, by these new 'converts'. Others chose to retain 'traditional' goals and remain infidels in the eyes of the Jesuits.

Another method which was used to induce conversion should be construed as nothing less than bribery on the part of the Jesuits. The Jesuits gave trinkets, guns, and food to try to instill a sense of Christianity, and the Huron undoubtedly processed this behavior into their traditional gift-giving and alliance scheme (JR 10:53; JR 35:99). Some

scholars see this behavior as economically motivated as well as a transition to materialism (Riches 1982; Trigger 1987). The Superior of the Jesuits wrote in 1642 that more warriors were converting to Christianity than ever before. He relates the cause: "the use of arquebuses, refused to the Infidels by Monseignor the Governor, and granted to the Christian Neophytes, is a powerful attraction to win them: it seems that our Lord intends to use this means in order to render Christianity acceptable in these regions" (JR 25:27). To the Jesuits, this situation clearly meant to give a gun was to gain a convert. To the Huron, the concept of 'converting' took on an altogether different meaning. Any individual choosing to own a gun would likewise choose to agree to becoming a Christian, knowing full well the benefits of owning a weapon and the lax requirements of being a Christian.

### III. Decisions and Ideology

The following part of this discussion will address decision-making in the context of two Huron ideological institutions over the 150 year period of study. This discussion does not present a complete picture of Huron ideology because some of the topics are not conducive to analysis due to scant archaeological and historical references. The topics for which there is adequate information include: (1) the Feast of the Dead ceremony and mortuary analysis, and (2) creation myth. This will be

followed by a discussion of particular instances of decision-making and adaptation.

#### A. Feast of the Dead Festival

Within a few years of sustained religious contact, specific details of the Huron mortuary customs were recorded (Biggar 1936:160-163; Wrong 1939:205-220; JR 10:265-267). Referred to as the 'Feast of the Dead', this main mortuary event served several important ideological, economic, and social functions (cf. Hickerson 1960). The Feast was a social binder of individuals, bringing together members of many groups to interact, renew bonds, and make new ties. This is an important concept, because without this institution for social unification, group members could drift apart and even become potential threats. The Feast allied groups that needed this reassurance about peaceful relationships. In 1615, Champlain noted that the feast was held so that the Huron could

... renew their friendship, saying that the bones of their relatives and friends are to be placed all together, representing by an image that just as their bones are collected and united in one and the same place, so also during their lives they should be united in friendship and harmony as relatives and friends [Champlain Voyages 3:160-163].

The Feast also served as an avenue for reinforcing ideological beliefs. A portion of the soul of each deceased individual could not go to the Land of the Souls until he/she 'walked to the kettle'. Thus, the Feast provided the living group members with a means to reinforce beliefs and pay respect to the dead. Economically, the Feast served a

distributive function, where the souls of goods could be sent to the Land of the Souls for use in the next life. Likewise, goods were apportioned throughout the ranks of the living, potentially equalizing any disparities of wealth acquired through trade.

The eight to ten year occurrence of the Feast was based on several rational concepts. With the removal of single interments and reburial in a large pit, the host villages released the souls of the dead, and the village could be moved. Cultural geographer Heidenreich (1971) explains that villages needed to be moved every few years because nearby wood supplies for firewood and structural repairs would be depleted and the soil nutrients in nearby fields insufficient for efficient agricultural pursuits. The Feast also provided the opportunity for amiable splits of the village to occur, if factions had arisen or the population grown too large.

This discussion of the functions of the Feast outlines its valuable role to all subsystems. Review of the historical and archaeological literature reveals how the Feast evolved during the period of contact with Europeans. There are several references to the Feast within the first 50 years of contact (Biggar 1936; Wrong 1939; JR 10:265-307; JR 39:29-33), and little of the details change between descriptions. These narratives underscore the Feast's function of redistributing goods, bringing together villages from far away, and mourning and paying respect to the dead.

The Feast also provided an acceptable avenue for factionalization, through rules of the Feast and regulatory councils (JR 10:279-281). The Jesuits even noted that the Huron 'mingling of bones' through the mass burial had the outstanding by-product of equalizing all people, in wealth and stature - a lesson the French could have learned from (JR 10:283). The Feast of 1636 saw infidels and Christians interred together with the same ceremony (JR 10:301), with the Jesuits invited to inter their dead countrymen with the Huron (JR 10:305).

The Huron practice of burying infidels and converts together during the early contact period probably resulted from one main factor. The Huron believed that the Feast served to bind people together. Since there was no significant difference perceived between infidels and converts, the dead therefore needed to be buried together. Thus, conversion to Christianity did not result in alteration of traditional concepts of social unity, nor did it necessitate group differentiation.

Nearly 60 years later, Cadillac, the commander at the French post at Missilimackinac, witnessed and recorded the occurrence of a Feast of the Dead ceremony (Quaife 1962:42-44). The details of the Feast program have changed slightly, if compared with earlier accounts, but the three primary function of the Feast are still intact. The 1690s Feast served to redistribute goods, bring together and bind groups, and reaffirm ideological beliefs. One of the major



differences to be noted in the 1690s account is the manner of disposing of the dead. The early 1600s accounts indicate that the dead were buried together in a large pit, or 'kettle'. Cadillac indicates that at the end of the Feast "each take up the bones of their relatives and carry them to some stony place, hollow, rugged, and unfrequented" (Quaife 1962:44). A review of the relevant archaeological literature provides insights into this discrepancy, as an indicator of change.

Reflections of ideological beliefs and behavior are often sought from the archaeological record. The clarity of these reflections can be clouded, however, by the changing indigenous ideology upon contact with Europeans. Often, two scholastic attempts to infer contact effects on a given burial component can yield disparate results. In the case of the Fletcher site burial locality in Michigan, Robertson's (1982) and the Mainfort and Martin (1985) analyses yield dramatically different conclusions, each with critical implications for the culture group's social-cultural identity, integrity, and manner of organization. A similar situation occurs between the Robinson et al. (1985) analysis at the RI 1000 site in Rhode Island, and that of Nassaney (1989). These two examples of how variable conclusions can be derived from identical data sets suggest that caution be heeded in relying on burial components as indicators of culture change or continuity in an historic culture contact context. These site types should be used in

conjunction with available historic material, and with the other culture subsystems information and decision-making processes, to understand how the whole system articulates and operates with contact.

The complexities of culture contact situations can lead to misinterpretations of the symbolism and meaning of burial contexts. For instance, the historic record indicates that upon contact with Europeans and accessibility to trade goods, the Micmac were seen to load vast quantities of materials into grave lots. This was done because the Micmac knew there were no such items in the "Land of the Souls" since the goods had just recently arrived. They chose to send their deceased friends and relatives a share of the items (Conkling 1974), and by doing so, created a burial locality which could be interpreted by archaeologists to reflect a desire for wealth and the creation of status or ranking, based on the apparent differential quantities of materials.

If the available information relative to Huron burial sites were used in isolation from historic documents to assess the culture's reaction to European contact, it could be concluded that this was a group in the process of rapid systemic change and disintegration. Archaeological evidence of Huron burials, or the physical remains of the Feast of the Dead ceremonies, indicates a changing structure of the practice through time. However, a change in the tangible evidence does not necessarily mandate a change in the

functions of the ceremony. Any alteration in the burial form would be related to decisions of accommodation and adaptation of the subsystem's configuration, goals, and norms.

The influx of large quantities of trade goods as grave lot inclusions is predominantly used in Huron studies to conclude that: (1) the Huron were totally dependent on European wares, and (2) a hierarchical rank and status system was emerging, with both leading to disintegration of egalitarianism and culture decimation. From historical accounts, detailed descriptions are known concerning the physical manifestations of the Feast of the Dead ceremony (Biggar 1936:160-163; Wrong 1939; JR 10). A problem paramount to the issue of change or stasis is that of comparing interpretations of precontact burial behavior with contact burial behavior, where the latter site type has the benefit of detailed elaboration available through historical documentation.

When Raudot was through Detroit in 1710, he recorded a few details of the Huron mortuary practices. Although this account does not pertain to the Feast of the Dead festival, it does provide a description of burial behavior in the interim between Feasts. Raudot wrote that the dead were buried with relevant goods, so that "they will not arrive in the other world as wretches" (Kinietz 1965:409). After the body was buried, a wood structure was built over the area, with the appropriate totemic image carved on to it.

Although this description details burial behavior similar to Algonkian groups, Champlain, in 1615, provided a nearly identical account of Huron interment of dead between Feasts. One of the options, according to Champlain, was to put the dead "into the ground ... which they cover with tree bark, putting earth on top, and over this grave they erect a little cabin" (Biggar 1936:160-163), where the body would stay for safe-keeping and worship until the next community Feast.

The last detailed description of a Huron Feast of the Dead is found in Charlevoix's journal (Shea 2:192-193). Collecting information in 1721, he states that the Huron held the Feast every 10 years. One of the terms for inclusion in the Feast is that the dead cannot have died a violent death, by drowning or torture (or their souls would wander the earth forever). If they died by some brutal means, the body must be buried immediately. This special requirement is noted over the 150 years of Feast of the Dead observances (Wrong 1939:205-210; JR 11:131; JR 39:31-33).

Another consistent factor of the Feast is that a chief and council are chosen to lead the ceremonies (Quaife 1962:193; JR 10:261-263, 279-283). Shea indicates that the 'kettle' and giving grave goods were still in vogue when he saw that the "common place of burial, is a great ditch lined with the finest furs and whatever is most precious" (Shea 1962 (2):194-195). He also emphasizes gift-giving, distribution, and the bonding of friends from far away.

Although Shea apparently may not have witnessed this ceremony, the fact that these details were available 30 years after Cadillac's report suggests that the principles of the institution were still known to the Huron, and possibly still in practice. Of course, there is the chance that Shea copied this information from a previous source, but there appear to be unique details in his narrative that support its authenticity.

This review of relevant historic documents and archaeological collections indicates that the Huron Feast of the Dead underwent a series of transformations stimulated through contact with European populations. This accommodation and transformation is most visible in the archaeological record. Nevertheless, the historical record suggests that decisions were made for adaptation of Christian elements and adaptation for the sake of economic and material concerns. The underpinning social and ideological norms and goals remained virtually unchanged throughout this period of contact, although decisions to manifest the belief system in an altered format were undertaken. The social importance and persistence of the Feast is emphasized by the fact that the Huron passed the ceremony on to other Great Lakes Native American populations (Hickerson 1960). The Algonkian adoption of the Feast in the historic period suggests that the Huron ceremony was intact enough through the seventeenth and eighteenth centuries to be transmitted to another group.

## B. Huron Mythology

Changes are apparent in Huron mythology over the 150 year period of study, particularly details of the 'creation' myth. In content, the creation myth undergoes incorporation of Christian elements adapted onto the original storyline. At the time of the arrival of Europeans onto the North American continent and the subsequent written recordings of observations of Native American cultures, it becomes apparent that most groups had in place some form of mythological explanation for their origin and existence. A sketch of the first recording of the Huron creation myth, and ensuing adaptations through the course of contact, elucidates decision-making processes in the context of ideological incorporation.

Le Jeune's 1636 account of the Huron's story of creation relates that a woman, named Eataentsic, made the earth and people. At this time, she has one son, Jouskeha, who takes care of all living things and is a good deity. Eataentsic, who is in charge of souls, is quite powerful and can be bad if thwarted. Thus, there is a fundamental duality of good and evil, but the Huron believed the two deities lived in the sky, behaving like people on earth. Eataentsic is supposed to have fallen from the sky, while with child, and created the earth, with the assistance of water mammals (JR 8:1171-119).

The analogy of the Christian concept of Heaven and Huron's belief in Eataentsic originating in the sky was made

by the Jesuits upon hearing the creation myth. Le Jeune wrote in 1636 that the Huron believed that "Heaven existed a long time before [Eataentsic fell] ... above the arches of the Sky there, was and still is a land like ours, with woods, lakes, rivers and fields, and Peoples who inhabit them" (JR 10:127). At this contact, Le Jeune also observes the parallel between Adam and Eve and the Huron story of how Eataentsic came to fall to earth, including eating of forbidden fruit (JR 8:127-129).

Within this tale, Eataentsic recruits the aid of a turtle, who pulls mud up from the bottom of the lake, to put on its back to form an island upon which Eataentsic and her child can live. This time, Eataentsic has a daughter, who immediately becomes pregnant (the Huron said there were strangers on the island, who must have done this), and begat two boys, who fought constantly. Le Jeune notes " ... judge if this does not relate in some way to the murder of Abel" (JR 10:129). There is a fundamental difference, however, since Eataentsic strikes her son, causing him to bleed profusely. As he fled, his blood turned to flint, which the Huron used to make tools. His brother followed him and killed him.

Le Jeune stated that there were other biblical allusions in the Huron creation myth. The similarities between elements of the Christian and Huron ideological-religious parables can be the result of either: (1) Christian influences on the indigenous institution with the

latter adapting, or (2) fundamental cross-cultural parallelism present before inter-group contact. The historical data pertaining to this subject suggests that the early narratives of Huron creation myth are relatively 'pure' and do not reflect Christian influences. This conclusion is based primarily on the notion that the 1636 creation myth recorded by Le Jeune reflects elements fundamental to early contact creation myth from other Woodlands Native American groups, such as a sky-god falling to earth, sea mammals making an island with mud, and opposition of good and evil. These similarities noted by Le Jeune are coincidental and interpreted by him to be comparable, when in effect they are not.

On several occasions in the early contact period, the Huron indicate that the substitution of Oki for God has not been adopted, as they say "your world is different from ours: the God who created yours, did not create ours" (JR 11:9). The important point to consider here is that these similarities between the two religious ideologies could have provided the opportunity for subtle changes to be made by the Huron by adapting and incorporating interesting elements. Despite the God/Oki and biblical creation/creation myth analogies, the Huron ideology differed from Christianity in the fundamental belief in the animism and guardian spirit of everything across the landscape. This animistic component relates directly to the importance of indigenous offering to appease or honor spirits. Huron made



'sacrifices' and asked for assistance from spirits, which was later adapted in the Christian prayers behavior.

In the 1646-1647 Jesuit Relations, the vitality and importance of Huron story telling is observed by the Jesuits, noting that this is done "so that the young people, who are present and hear them, may preserve the memory thereof, and relate them in their turn, when they shall have become old" (JR 30:61). On one occasion, a Christian Huron was telling others of the "creation of the world, of the Angels, of the Demons, of Heaven and earth" (JR 30:61). None of the listeners apparently realized that the story teller was relating the biblical version of creation, until he spoke of God as Creator of the world. This supports the conclusion that the two versions of creation were quite similar from the outset, thus allowing individuals to incorporate and adopt Christian elements into their cosmology as they deemed necessary.

The outline of creation related by Cadillac in the 1690s is very general and is said to pertain to all tribes of the Great Lakes, with a mix of Christian and indigenous elements (Quaife 1962:52-53). A feature added to the storyline is that of the biblical Flood, where rains fell and the water rose so that no dry land was left. Deviating from Noah's version, the Native American story relates that an old man and his family from each tribe built a large canoe to put provisions and animals in. The story still

centers on the Great Turtle forming a land mass upon which the survivors could settle (Quaife 1962:53-54).

Thus, after 80 years of sporadic contact, there are clearly Christian elements which have been adopted into traditional ideology. This has been occurring in many realms of cosmology and indicates decisions were processed to adapt myths or create new myths, if the problems encountered required such solutions. In particular, the addition of the Christian Flood to the indigenous storyline does not make the overall content deviate from its basic purpose; that is, to offer power and spirituality to the explanation of being. The element of 'water' was a characteristic of the Huron creation myth as first recorded in 1636, and decision to alter this to the 'Flood' concept may alter the content, but not the intent.

In Charlevoix's 1721 journal, the Iroquois creation myth indicates the continuity of Eataentsic, her offspring and Oki's (Shea 1962 (2):144-145). The deluge, "in which not a soul was saved, so that in order to repeople the earth it was necessary to change beasts into men", is a recurrent theme, indicating that the Christian Flood concept has become a permanent fixture of the Huron creation myth (Shea 1962 (2):144). Nevertheless, the continuity of a Great Spirit, lesser evil and good deities, and the notion of appeasement are still manifested in Huron ideology, despite 100 years of European religious assault.

One of the social roles mythology played for indigenous cultures was to create history. Myths allowed for reaffirmation and explanation of new elements and allowed for the creation of events. The incorporation of Christian elements into native Huron cosmology can be conceptualized similarly to Sahlin's evaluation of Hawaiian contact events (Sahlins 1981:9-11). Myths have the potential to "succinctly encode the entire Hawaiian theory of the European presence" (Sahlins 1981:10), and the Hawaiians incorporated Europeans as god-like beings in a fashion similar to Huron behavior. Through the incorporation of Frenchmen into the cosmological subsystem, and thus other subsystems, the Huron could explain and have a means for accepting the presence of these foreign beings and foreign concepts. As is the case in many other areas of Huron-French contact, and decisions to merge new ideas or adapt old ones, the Huron undertook this procedure to reflect their basic principles. Thus, the Huron can be shown "by virtue of these principles, to [have been] selective rather than indiscriminate" in their behavior (Sahlins 1981:29). The content of the myth may change, but not the goals and norms.

#### IV. Historical Reality of Ideological Change

The remaining portion of data presentation and analysis relevant to ideological decision-making concerns consists of an historical perspective of the reality and meaning of 'conversion', particularly observations of the decisions and

behavior of 'infidel' and 'Christian' Huron. It is suggested that Huron ideological decisions were based on the desire to acquire goods and power, but within indigenous goals, norms, and bounds of appropriate behavior.

Individual decisions to convert to Christianity were made based on a variety of information and circumstances. References to the details of specific cases reveal something of the contexts and processing of decisions, based on the consideration of ideological goals and norms. After a few years of European religious influences and the mutual understanding of relevant concepts, the Huron began the process of incorporating variant aspects into their ideology. Already possessing indigenous beliefs of 'soul', upon hearing that the Jesuits knew how to 'save' souls from being cast into the eternal flames of Hell, some Huron became intrigued. Choosing to be baptized, some Huron believed that this was to be the ceremony that would reveal to them the mysteries and secrets of soul-saving (JR 5:191-193).

Recalling that until the late 1630s no healthy Huron adults were baptized, the Jesuit and Recollet journals are filled with details of traditional Huron ideological behavior and institutions, as they ran counter to Christian principles, including traditional shamans, rituals, dances, dreams, curing ceremonies, and feasts (cf. Williams 1982). Thus, up until 1640, baptisms were almost exclusively performed on the sick and dying, and decisions to

incorporate subtly different Christian elements were thoroughly based on existing information, institutions, goals, and norms. For instance, upon seeing children recover from the 1636-1637 epidemics when baptized, the Huron "are now bringing us children to baptize from two, three, yes even seven leagues away" (JR10:13). Likewise, the inclusion of Catholic ritual into the existing system was feasible because the Huron already had ceremonies (mass), gift-giving (offeratory), and sacrifices for worship (Praying). The Jesuit's practice of giving 'prizes' to Huron children who attended catechism and recited verses was certainly an impetus for 'converting', but also within the bounds of the societal norms of reciprocity and gift-giving (JR 10:21). The Jesuits apparently realized that their missionary efforts were waning and they reorganized their 'plan of attack' in 1639-1640, with the centralization of all Jesuits in the village of Sainte-Marie. This was also undertaken to provide the Jesuits with protection against increasing Native American threats and to protect their food supplies (JR 16:237-241). The addition of Christian elements to the traditional system may have been viewed as supplementing the operations of a system which would always be made "better" or stronger (Crosby 1988; Riches 1982).

Much of the content of the Jesuit Relations up to the 1640s reveals that the Huron were imitating Jesuit behavior, possibly for material gain. Children making the sign of the cross 50 times a day, or reciting the Pater and the Ave in

Latin, do not indicate true conversion to Catholicism (JR 10:11-33), though this did to the Jesuits. From the perspective of the seventeenth century French Jesuit missionary, the Huron were indeed truly converted upon baptismal rites. From the perspective of a twentieth century anthropologist, memorizing bible verse or symbolic gesturing by the Huron does not mean they were Catholic. It is indicative of decisions for incorporating foreign elements considered to be interesting, unique, helpful, or power-laden. This is rational behavior, which could be included into existing goals and norms. For instance, the Jesuits told the Huron that they should embrace the Christian religion, "for it was the only way to go to Heaven, but other benefits would result, since it would [cement] in the future a very close alliance with the French, who ... would ... assist them against their enemies" (JR 10:27). To the Huron council, a decision to convert seemed wise and appropriate. The alternative was to go to "a place where no blessings come, and where ills of all kinds abound; that it is a fiery furnace ... the damned would be forever tormented, and burned without ever being consumed" (JR 10:29).

In relating particular events of the Huron shaman or medicine men, other analogies between the belief systems are apparent. That is, the Jesuits explicitly stated that the jugglers were agents of the Devil. When a juggler correctly 'predicted' the future regarding a battle with the Iroquois,

the Jesuits concluded that "the Devil was sentinel for him" (JR 10:197). Successes by shamans in curing, dream fulfillment, causing rain, or casting spells were likewise attributed to their close association to the Christian Devil.

An interesting attempt at persuading his fellow Huron to convert was offered by a 'good Christian' in 1639. He extolled upon his brethren the virtues of French goods, which they had readily adopted upon finding them to be superior to their 'stone hatchets and wooden and earthen vessels'. He queried why would they not adopt the French religion as well, since they would live more comfortably by becoming Christians (JR 17:41-49). The pagans countered that the tenets of Christianity did not appear to insure good behavior, since they often observed un-Christian-like behavior in those claiming conversion, whether Huron or French (JR 18:155; JR 20:19).

The 1640s witnessed a period of decline in the faith of the Jesuits power, resulting in threats, volatile behavior, and decisions on the part of the Huron to remain as 'infidels'. Some Huron believed the rewards of Heaven were nothing more than fables. They were particularly distressed at the high mortality of children, whose deaths the Jesuits were attributing to the sins of their parents. This seemed unfair to the Huron, since God "ought not to punish the innocent for the guilty" (JR 19:211-213). The Jesuits mention during this period that the Huron were unwilling to

embrace Christianity because it was in opposition to everything that constituted their society; fishing, hunting, councils, crops. Everything in daily life was found to "abound in diabolical ceremonies", which the Huron could not denounce without denouncing virtually their entire lifestyle (JR 28:51-53; JR 39:123-125).

The relation of individuals choosing baptism in the late 1630s-1640s reveals some of the operating assumptions for such decisions. Often, the Jesuits wrote that the Huron would agree to specific requirements of baptism and conversion in exchange for a passage to Heaven and safety from disease. Some gave up spouses who would not convert, others gave up charms and eating meat (JR 20:217-290; JR 22:95-105; JR 35:243-259; JR 38:45-47). It is also noted that even the most pious partake in acts of warfare and captive torture (JR 22:153). With the 1649-1650 Huron diaspora, the Jesuits reflected on the reality of the situation and concluded that the Huron "would have been lost if they had not been ruined; that the greater part of those who came in quest of baptism in affliction, would never have found it in prosperity" (JR 38:47).

An insight into decision-making and ideology is found in the Jesuit Relation of 1645-1646 (Figures 6-7). A recently converted captain of high rank found a conflict of principle in one of the duties he was to perform (JR 28:85-87). Refusing to partake in a traditional ceremony, a council was called to address their recourse to the



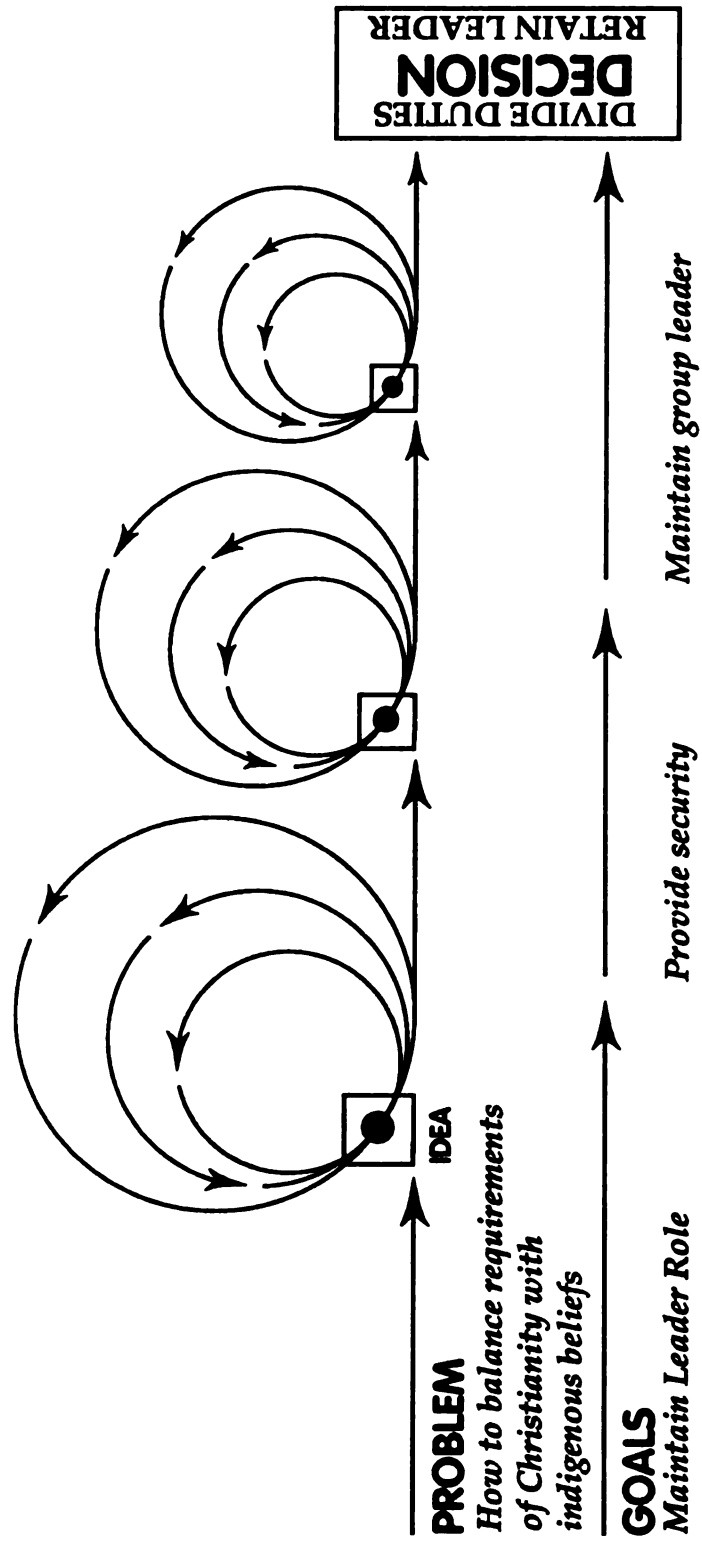


Figure 6: Spiral Model of Leadership Role and Conversion Decision-Making Process

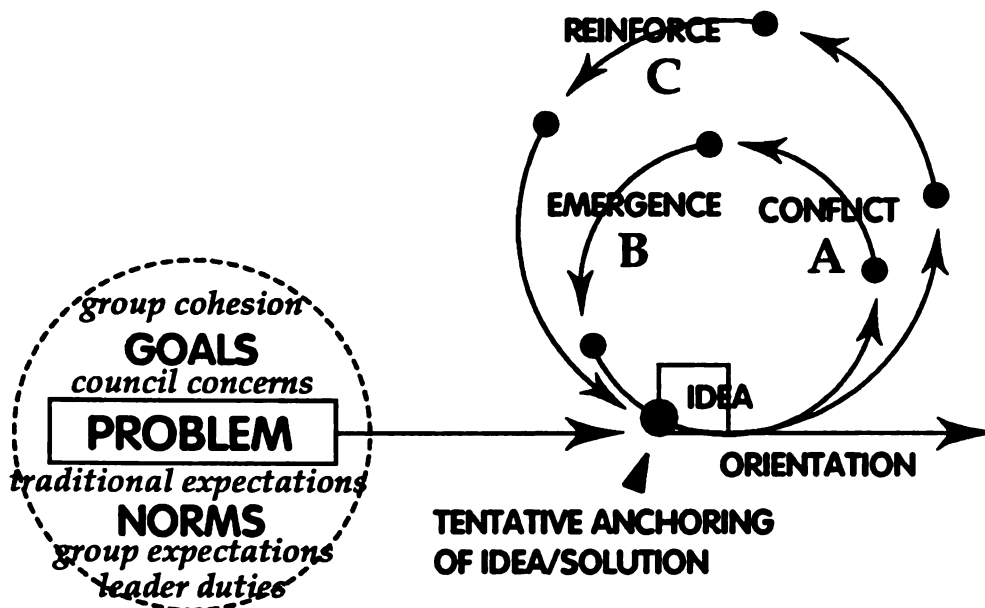


Figure 7: Idea Components of Leadership Role Decision-Making Process

1. {
  - A. Council realizes necessity of retaining leader for group, but leader won't perform duties considered to conflict with Christianity
  - B. Can get new leader
  - C. But that would result in tearing village apart
2. {
  - A. Balance needed/stability
  - B. Divide leader duties: traditional vs. Christian
  - C. Retain leader
3. {
  - A. Achieve balance/stability
  - B. Get leader to do duties considered anti-Christian and retain original leader to continue in position
  - C. Best solution for welfare of group

captain's decision. After much deliberation, and seeing that the Christian captain would not bend in his faith,

... at last, to find a way out of this difficulty, which the Elders feared would bring about the dissolution of their village ... the Council decided that it was necessary to divide the office ... that some one else should thereafter take charge of the matters forbidden by the faith ..." [JR 28:89].

The Christian captain would continue as main administrator of public affairs, with an assistant for conflicting duties.

There is a 10 to 12 year hiatus in recordings of ideological concerns of the Huron, since during the 1650s-1660s there was no direct European religious influence. When the Huron settled at the Mission of Esprit, Allouez noted that "since their country's downfall, they have received no Christian nurture ... they are Christians rather by calling than by profession" (JR 50:307). Allouez set out to restore the faith by baptizing 100 children and relates that the adults quickly returned to their pious ways of praying and attending church (JR 50:309-311). Infidels are still being baptized on their death beds.

Observations of the Jesuits' successes and manner of conversion were often noted by explorers and military personnel. In the 1669-1670 journal of Dollier and Galinee it was recorded that the Jesuit father had baptized most of the Huron "when they have manifested any good-will toward Christianity, before they are capable either of confessing or of attending holy mass, or keeping the other commandments of the Church ... [and] the fathers ... had never yet ventured to say mass before them, because these people

regard this service as jugglery or witchcraft" (Kellog 1969:206).

The following year, the Huron resettled at the Straits of Missilimackinac, with Father Marquette establishing the Mission of St. Ignace near the Huron and Ottawa villages. Marquette, though staying only 20 months, regales of the pious virtues of the Huron in his journals (JR 54:169-171; JR 57:249-263). Although Marquette's journal entries probably relate the fundamental aspects of the situation, there are two outstanding details that must be considered when using his documentation for anthropological discussions. First, Marquette admitted that he did not speak the language of the Huron well, and that Allouez left them because they did not pursue their prayers to the level of his liking (JR 54:169-171). The second variable to be considered relative to the reality of the piety of the Huron in 1671 is unwritten and a matter of conjecture. It is suggested that Marquette may have had an ulterior motive for the positive promotional view he afforded the Huron and their virtuous ways. Marquette did not want to be at St. Ignace but wanted to go to the Illinois country. What better propaganda to gain a replacement than to relate how wonderful and pious the native people at St. Ignace are. Marquette may well be embellishing the reality of the situation, though we will never know to what extent. He writes that even the few infidels make the sign of the cross and speak honorably of Christianity (JR 57:251). Not long

after Marquette left St. Ignace, journal entries are far less positive about the piety of the Huron.

Other Jesuit relations of the 1670s-1680s describing the behavior of the Huron indicate that many had converted to Christianity, with infidels partaking in Christian activities as well (JR 61:105-121; JR 62:195-199). The Huron observe all of the necessary requirements of Catholicism: attendance of mass, prayers, chanting vespers, offerings, and so on (JR 61:105-121). Within the narratives of piety, vestiges of persistent traditional ideological elements are still visible, or they serve as the foundation upon which Christian elements were built (JR 61:117-121; JR 62:199). Two commonly reoccurring traditional aspects are noted, including dances and feast days centered on food. The Huron had been instructed that God would give them food if they were good Christians. The Huron would thus make an offering of the first fruits of harvest, not unlike their centuries-old practice of offering choice pieces of food to animal spirits or 'green-corn' festivals, in an effort to insure a balance in the man/nature relationship (JR 61:111).

Hennepin, at Missilimackinac in the fall of 1680, wrote that the Huron went to church "rather from curiosity than from any inclination to live according to our Christian maxims" (Shea 1880:260). He went on to note that the Huron still believed the Frenchmen to be spirits "because, had they gone so far [exploring] as we had, the strange nations

would have killed them, while we went fearlessly every where" (Shea 1966:260).

Upon arriving at St. Ignace, village in the early 1680s, the explorer La Hontan noted that the Jesuits were wasting their efforts on the infidel Huron, with only those near death requesting baptism (Thwaites 1905(1):146). Although the reality of the La Hontan/Adario dialogue of the 1680s is suspect, it is undoubtedly factually based on sentiments which La Hontan observed while travelling among the Huron. Thus, Adario is a real Huron personage and the basic argument is probably real, but the precise manner and content of the dialogue has probably been embellished for the intended audience. At its basic level, this conversation indicates that the Huron were having difficulties with the hypocrisies of French Catholicism, both in canon and practice. Adario found the Christian comment that "many are called but few chosen" to be dogmatic and unreasonable. Adario could see no logic in relinquishing traditional ways for Christianity, when 'being chosen' wasn't even an assured result. Thus, deciding to overthrow everything for conversion was too great of a risk (Thwaites 1905(2):442-443).

Adario goes on to list all of the similarities between Huron ideology and Christianity, wondering what would be the impetus to change since the Huron already had a "Creator of the Universe, under the Title of Great Spirit or Master of Life, whom we believe to be in everything ... immortality of

the soul ... capable of distinguishing between Good and Evil" and so on (Thwaites 1905(2):518-519). Reiterating a centuries old difference between the two religions, Adario 'notes' in this conversation that the Huron "believe that we shall go to the Country of Souls after death; but we have no such apprehension as you have, of a good and bad Mansion after this Life, provided for the good and bad Souls" (Thwaites 1905(2):519). Another unreasonable aspect of Christianity, to the Huron's view, was the Jesuits' instruction that Jesus had been resurrected and "restr'd sight to the blind, made the lame walk upright, cur'd all the diseases upon the Earth", then going across the lands to teach everyone the same religion (Thwaites 1905(2):533). Why then were there so many religions, even between the French and British, and why had not Jesus come to the Huron himself to teach his ways?

Adario ends his dialogue on religion by critiquing the Ten Commandments and the way he had observed the Frenchmen's behavior, concluding that the Huron had no need of the special rules that the French are so adept at breaking. Adario notes instances of the French undertaking false worship, as well as adultery, murder, theft, lies, slander, and other libelist actions, telling La Hontan that "You French Folks do, all of you, make large Pretensions to Faith, and yet you are downright infidels" (Thwaites 1905:533-539). La Hontan concludes that the Jesuits need to spend more effort teaching Adario.

A letter dated 13 September 1698 reiterates the Jesuits problems at St. Ignace with missionary efforts, which have been compounded by the close proximity of the French fur trade post with its military and courers de bois. Buisson writes that

... the Jesuit fathers pointed out to us that because of the bad example of the French, they have very little success at this place even though they've been working zealously for such a long time to convert the Huron and Ottawa ... You don't see them pray or go to mass ... [Rapport Archives du Quebec 1965:43].

This same sentiment is divulged by Father Carheil, who writes that the military is the enemy of their mission efforts, as they supply the Native American at the Straits with liquor, cheat them in trade, and debauch the women (JR 65:189-253). The immorality, drunkenness, gambling, and fighting is rampant, due to the impropriety of Cadillac and his soldiers. The Jesuit Father recommends the Huron not move to Detroit where they will once again be immersed in a setting of vice.

Between 1702 and 1705, most of the Missilimackinac area Huron had been induced by Cadillac to resettle near Fort Pontchartrain. The power and authority of the Jesuits had been undermined in the view of the Huron, because the missionaries could not get the French soldiers to behave in a Christian-like manner (JR 65:199). Cadillac's plans in 1703 were to bind the Huron and French even closer by sending Huron men to France and outfitting them as French military personnel. The Huron agreed to this and requested that they be given guns and clothing like the soldiers.



Cadillac felt this was the best plan to finally make the Huron the King's subjects, noting that converting them to Christianity would come later. He wrote that his plan

... would have a better effect than a hundred missionaries; for it is certain that since they have been preaching the gospel to these peoples, they have made no progress, and the good resulting from it may be reduced to the baptism by them of infants who die after having received it [MPHC 1903:166-167].

Few references to Huron ideological concerns were recorded during the early 1700s, until the Jesuits re-established that foothold at Detroit in 1728. Raudot observed in 1710 that the Huron at Detroit were fully embraced in Christianity, and that they were good Catholics (Kinietz 1965:409), although the accuracy of this report can be in question since Raudot appears to be confused on other historical details (Kinietz (165:380-415).

One narrative of specific Huron ideological behavior is found in Charlevoix's 1721 narrative of his encounters with the Detroit Huron. He relates details of Okis, medicine men, the importance of dream visions, clan totems and symbols, dog sacrifices, and rites of passage, suggesting a persistence in the goals of the ideological concerns, if not in the details (Shea 1962 (2):143-231).

References in the 1730s and 1740s relative to Huron and Christianity consist of a series of letters between Father de la Richardie and the French Governor Beauharnois, and related correspondence (WHC 1:L279-485; MPHC 1904:49-53, 76-77, 163-164, 172-194, 201-204; JR 69:51-53). A notation about the Huron at Detroit in 1735 says that until only a

few years prior (1728), there were no Christian Huron except the ones at Lorette. When la Richardie arrived at Detroit in 1728, he converted all of the Huron within a few years. It is also noted that the Huron had no contact with a priest for the 14 year period prior to la Richardie's arrival, but this did not appear to thwart his efforts (JR 68:283, 333). La Richardie, in a retrospective view of his missionary efforts with the Detroit Huron, wrote that the Huron were not Christians upon his arrival, though many of the sick and elderly had been baptized previously. Upon converting a Huron chief, la Richardie found that the whole nation was suddenly willing to follow this example (JR 69:53).

The meaning of this mass conversion should be considered in light of the options for this behavior. Further investigation of the historic documentation of this period indicates that the Huron had great respect for la Richardie. They were also undergoing a period of political and economic upheaval, playing the French, British, and other Native American groups against one another in an effort to maximize their economic and political options. Some of their decisions for alliances did not work as they had planned, and the Huron were fearful for their safety in the late 1730s and 1740s. Thus, la Richardie became an important player in the Huron game. By choosing to convert, the Huron allied themselves with la Richardie, who aided them in their negotiations to maximize their options. His

revered position is evidenced by the role he played as spokesman for the Huron to the French government.

The Huron desire to relocate away from Detroit included moving their priest(s) with them, whether the move was to Montreal or to the English side. La Richardie, whose primary motivation was undoubtedly to stay near his Christian flock, even gained permission from the English governor to serve as the Huron's missionary, if they moved (WHC 17:414-415). Naturally, the French government did not take this behavior lightly, and saw the Jesuit's actions as an effort to undermine French alliances. Although the Huron did not move to Montreal or to the English side, their village in Sanduskey put them in close proximity to English trade networks. The Jesuits remained near the Huron in the Detroit area although no details of the magnitude of Huron piety are to be found. Potier's 1743 census does not distinguish between Christian and non-Christian villages, households, and of only a few individuals. This suggests that the Huron were not split into two geographic groups based on religious beliefs. Any factionalization, therefore, must have been formed along political alliances, and not ideological, economic, or clan concerns.

#### V. Concluding Comments

The Christian-infidel dichotomy of the Huron had several basic results: (1) it instigated the necessity for a new set of goals, problems, and decisions to be contended with, (2) the new goals included the ability to incorporate

aspects of the Christian system into the indigenous ideological pattern, and (3) the pattern of norms and beliefs, being fluid in nature, were able to gradually alter, without actually changing in content. These factors resulted in the fact that infidels and Christians were able to live together in the same villages, go to battle together, and serve on the same councils throughout the period of study. There was no loss of traditional 'faith' due to population decimation, and it did not lead to mass conversion as suggested by McNeil (1976) and Martin (1978). The degree or magnitude of the impact of Christianity and the reality of actual conversion is not considered to be as extensive as some authors suggest.

Consideration of the decision-making processes suggests that the reasoning for the state of Huron ideology lies in a series of solutions which include alteration of existing elements and incorporation of new elements to adapt the institutional components within societal norms and goals. Many Iroquois actions followed the same trajectory of incorporating compatible Christian elements into their indigenous cosmology (Blanchard 1982:90-92; JR 64:125). Within the ideological subsystem, the context of norms and goals would include mechanisms to make positive adjustments. The decision(s) to add the Christian God to the belief and myth system can be considered a rational choice. God was seen as more powerful than the Huron deities, bringing plagues, pestilence, and warfare. By allowing God into the

Huron system, the opportunity arose for appeasement and worship. The man/nature balance which ideology regulated through ceremony and daily behavior was not altered through the inclusion of Christian elements. In essence, the Huron ideological subsystem underwent a series of transformations based on incorporation and not conversion.

## Endnotes: Chapter 5

<sup>1</sup> This study is not meant to provide a complete review of the impact of Catholicism on the Huron, and will give only a cursory perspective when relevant of the religious tenets and practices. Cf. Grant (1984); Blanchard (1982); Duignan (1958); and Healy (1958) for an in-depth view of the history of the Catholic church and Jesuit missions, as well as differences between the Jesuits, Recollets, and Franciscans.



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DECISION-MAKING PROCESSES IN A CULTURE CONTACT CONTEXT:  
THE CASE OF THE TIONONTATE HURON OF THE UPPER GREAT LAKES

By

Susan Margaret Branstner

Volume II

A DISSERTATION

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Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Anthropology

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CHAPTER 6:  
Technological Considerations: Data and Decisions

I. Introductory Comments

Throughout the discussion of decision-making, the methodological partitioning of the culture system has stressed the interrelatedness of all parts to the whole. This is nowhere more visible than the technological subsystem as it is manifested by its material culture component. Unlike the social or ideological subsystems, there is a greater opportunity to address technological decision-making processes from the archaeological record. The historic record has useful contributions to make to this topic, but cannot provide the detail of the archaeological data.

This chapter will present historical documentation relative to technological decisions, in the contexts of material culture change and adaptation. Of primary concern to this discussion is the necessity to ascertain whether the change or adaptation of the material culture assemblage necessitates or stimulates a change in the technological subsystem. Change in technological goals and norms would be requisite, and naturally affect the operation of other subsystems and the culture goals and norms. Investigation of the role of material culture in the archaeological record

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will provide the basis of this discussion. Decision-making contexts in this discussion primarily concern individual decisions to adapt the material culture assemblage, based on a new or different set of choices, options, and possibly, goals. New goals might be to acquire wealth at a disparate level, to signify social status and ranking, or symbolism of group identity and boundary maintenance.

## II. Historical Considerations

Examination of the same body of historic documents for all subsystem components reveals that the least amount of information is available for technological insights. It is not surprising that historic entries focus on matters of politics, ideology, and social concerns, since the subjects of trade, religious conversion, and cultural differences were of paramount importance to European observers. Native American material culture was considered primitive and details are lacking in the historic record of the Huron regarding particular items. This weakness in documentary evidence underscores the necessity of turning to the archaeological record for questions of decision-making, change and adaptation.

The early European concept that Native Americans possessed 'primitive' or 'inferior' technology because it was composed of simple items fashioned with little modification from the natural environ, is certainly ill-founded. Likewise, the contention that Native American technology was 'simple' only because it was represented by

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few and unelaborate material manifestations (to the Europeans) also misrepresents the reality of the situation. Precontact period Native American groups, as well as contact period, possessed the knowledge to make tools to successfully exploit the necessary subsistence resources. Whether chipped stone hoes or groundstone axes were considered 'crude' by European standards is not an issue, because as manifestations of technology they were adequate for the tasks at hand.

It is evident from historic documents that the arrival of Europeans and flow of trade goods provided the opportunity for the acquisition of unequal amounts of goods and rise of social classes based on wealth. This would have occurred through an alteration in goals of individuals and social norms of egalitarianism. Thus, feedback throughout the system would have stimulated change in all sectors: ideology, economics, sociology. It is feasible to assume that the accessibility of goods during the fur trade era could have stimulated individuals to make choices for unequal acquisition and long-term possession. However, investigation of the historic record does not support the rise of a wealthy class of Huron, and in fact, indicates that existing institutions were modified and adjusted to handle the influx of trade goods along traditional lines (Ramsden 1981). Likewise, archaeological evidence does not reveal wealthy households, but indicates a fairly even

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distribution of items across villages (cf. Finlayson 1985; Latta 1983).

Nonetheless, it is known that more goods were available and the European goods were actively sought after by the Huron in trade negotiations. Examination of the decision-making processes behind choices to alter the material culture assemblage indicates that two types of solutions were made: (1) solutions to change the traditional material culture based on European options, and (2) solutions to retain traditional material culture, but with the possibility of adapting it in some manner. The first category would entertain alteration of the technology, whereas the second would support the subsystem's integrity. Topics where these two option types are apparent in the historic record include burial items, the acquisition of differential quantities of goods for distribution through one of several conduits, subsistence and related material items, and items of personal adornment. The discussion of the accumulation of material culture as a means to acquire unequal wealth and create status differentiation is addressed in the social section. Following the presentation of relevant historical entries, archaeological manifestations and decisions will be addressed, and then compared to the conclusions drawn from documents.

#### A. Burial Goods

Previous discussion of decision-making processes in an ideological context suggests that decisions were processed

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on an individual basis to either retain or modify traditional burial customs. Nonetheless, the theme of socially binding participants was found to be maintained and reinforced. Historic references enumerate grave furniture of ossuaries throughout the historic period, but these listings are found to be very incomplete when the archaeological record is consulted (Wrong 1939:207; JR 10:265-271). However, as indicated by current research of fur trade post lists (Anderson, 1990 personal communication), the historic record does provide information about perishable items that would not survive into the archaeological record. Specifically, documents list perishable goods which provide critical details about items included in burials, such as the placement of food and clothing with the deceased for sustenance in the Land of the Souls.

Le Jeune noted the importance the Huron placed on gathering material goods for gifts to the dead:

... all the exertions, their labors, and their trading, concern almost entirely the amassing of something with which to honor the Dead ... they lavish robes, axes, and Porcelain in such quantities that, to see them on such occasions, you would judge that they place no value upon them [JR 10:265].

Loafs of bread and gourds of oil were also placed with the deceased (JR 10:271), but not all of the goods were put into the ground. Beaver robes, axes, kettles, and porcelain collars are often noted as being distributed among grieving kin. Le Jeune detailed the quantity of goods placed in the

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burial pit but noted that the majority of the gifts were divided amongst the Feast participants (JR 10:297-303).

It appears that decisions to attain new items in large quantities were made with the knowledge that these items were needed for inclusion in burials to send their souls to the Land of the Souls (Wrong 1939:172-173). The increase in quantity of grave goods in ossuaries through time should be understood in terms of disposal of the items for the benefit of all the dead on an equal basis. This contention is supported by the archaeological record which indicates that grave goods cannot readily be associated with individuals, but rather appear to have been placed for sharing by several individuals or the group. These points will be elaborated in the discussion of archaeological data.

#### B. Subsistence and Related Technology

Historic documents reveal scant details of the change in subsistence, procurement, and preparation material culture of the Huron. Corn, beans, squash, fish, with some reliance on mammals, birds, and collected plants appears to have been the basic Huron diet, with fluctuations in emphasis occurring with environmental factors or personal preference. Concerning subsistence and resource utilization, comparison of floral assemblages from archaeological contexts indicates that there was a continued and relatively consistent primary reliance on agriculturally produced products (corn, beans, squash). Collected plants also provide dietary supplements (Stopp 1985; Egan 1988).

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The ethnohistoric record substantiates this conclusion (Kinietz 1965). The long-term persistence of an agriculturally-oriented subsistence regime was undoubtedly supported by the information feedback that this was a reliable mode of food procurement. This information was, in turn, utilized to process decisions regarding settlement options. In the Late Ontario Iroquois period through the middle of the eighteenth century, the Huron decisions pertaining to settlement options were based on the necessity of locating a zone with sufficient frost-free days for agricultural purposes. Thus, settlement locale decisions were based not only on proximity to water and wood resources, and defense considerations, but primarily within the context of climatic requirements for agricultural concerns.

Decisions were made, however, to modify the role which corn played in trade, with European contact, due to the apparent benefits to be accrued. Although the Huron are known to have traded corn to neighboring groups before contact, the magnitude of this exchange is unknown (Wrong 1939:103; Heidenreich 1971:227-28). With the arrival of Europeans, who required supplementary food resources, more extensive surpluses of corn were produced by the Huron as a trade commodity. However, this did not result in an altered division of labor (WHC (16):368-369; Blair 1911 (1):281), but rather an intensified level of effort by women and children to increase production. It is believed here that

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women chose to alter time-consuming material culture manufacturing pursuits, choosing to replace these wares with trade items to allow time for increased corn production.

By the 1630s, the Huron had a well established system of trading surplus corn to neighboring tribes for furs (JR 31:209), in turn trading these furs to the French for trade items. Hence, their role as 'middlemen' in the fur trade was firmly established by the 1630s. Corn remained an exchangeable commodity for the Huron to produce through the first half of the eighteenth century (Blair 1911(1):281-282; Thwaites 1905:148-149; MPHC 1903:429, 447; MPHC 1904:201).

Although the diet composition appears to have persisted in general terms according to the historic record, the opportunity to modify or change the material culture for procurement and preparation arose with the availability of European tools. Nevertheless, the historic record indicates that the Huron made choices to change material culture based on efficiency, security, and consistency of technology. For instance, the adoption of iron arrow points did not alter the technique for hunting, merely the tool used for hunting (Wrong 1939:98).

The adoption of European metal kettles did not alter the foods being prepared, but did stimulate a change in preparation technique. It was no longer necessary to drop hot stones into clay containers to cook food (Wrong 1939:108-109), since the metal pot could be placed directly in the flame. Likewise, the cessation of clay vessel

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manufacture undoubtedly changed the women's scheduling of work (Figure 8-9). It has been suggested by some scholars that clay ceramics may have served a social, as well as a functional purpose, in that design motifs are thought to have served to symbolize group affiliation and group boundaries (Brashler 1981). Simply put, if a Huron was saying 'I am a Huron' through the pot decorations, the abrupt halt in ceramic production by circa 1650 must be accounted for, as indicated by both the historic and archaeological records. It may be that the group or individual identity which was symbolized or reflected in the ceramic motifs could be portrayed through another outlet, such as on clothing or house decorations.

Trigger (1984:22) says that ceramic manufacture was persistent up to the 1650 dispersal because there were not enough metal kettles available to satisfy needs and desires. This claim cannot be substantiated with historic or archaeological evidence, nor did Trigger compare this statement to the post-dispersal evidence. Without detailed pre- and post-dispersal trade lists and archaeological evidence, it is difficult, at best, to quantify the influx of goods for comparative purposes. Nor is it feasible to measure the level of Huron 'needs' and 'desires', particularly since they left no record indicating they were not satisfied with the availability of kettles.

The termination in ceramic vessel production and possible symbolism would suggest a disintegration of group

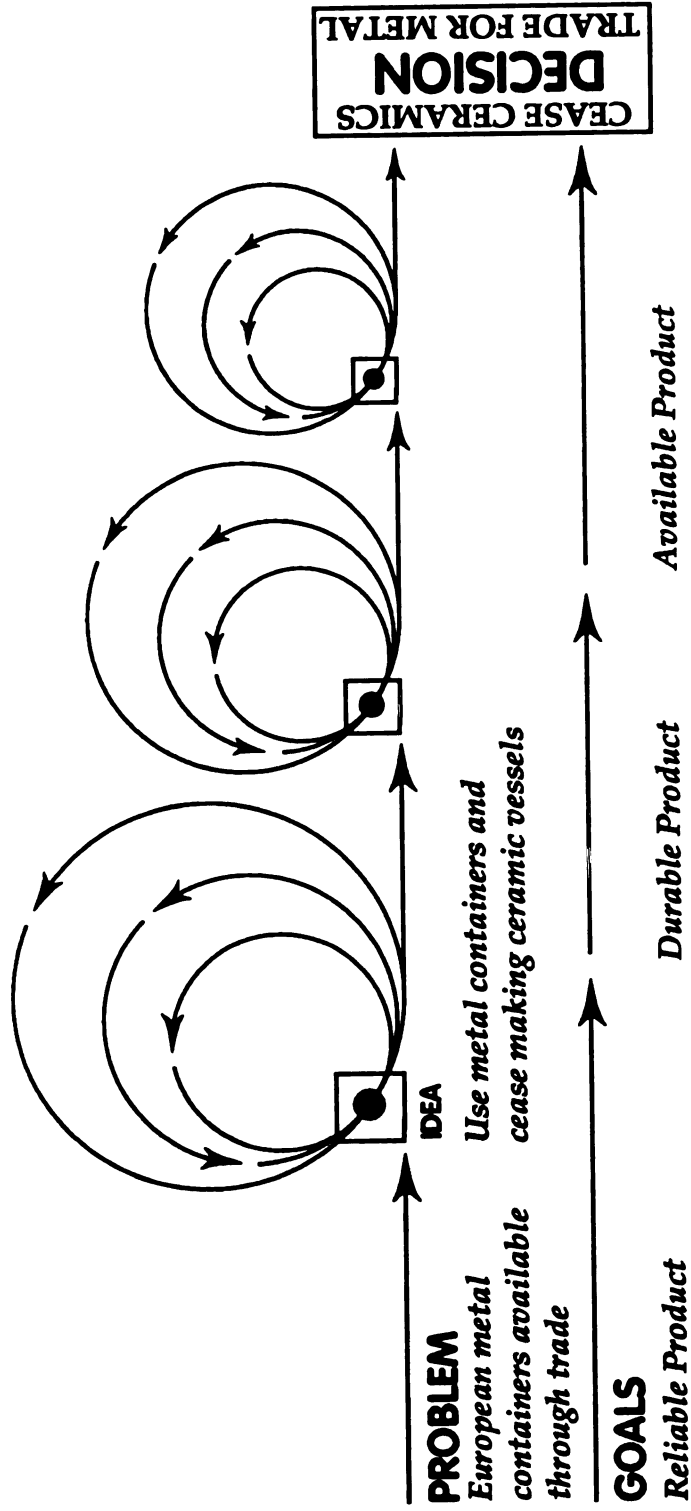


Figure 8: Decision-Making Process of Adopting European Metal Containers

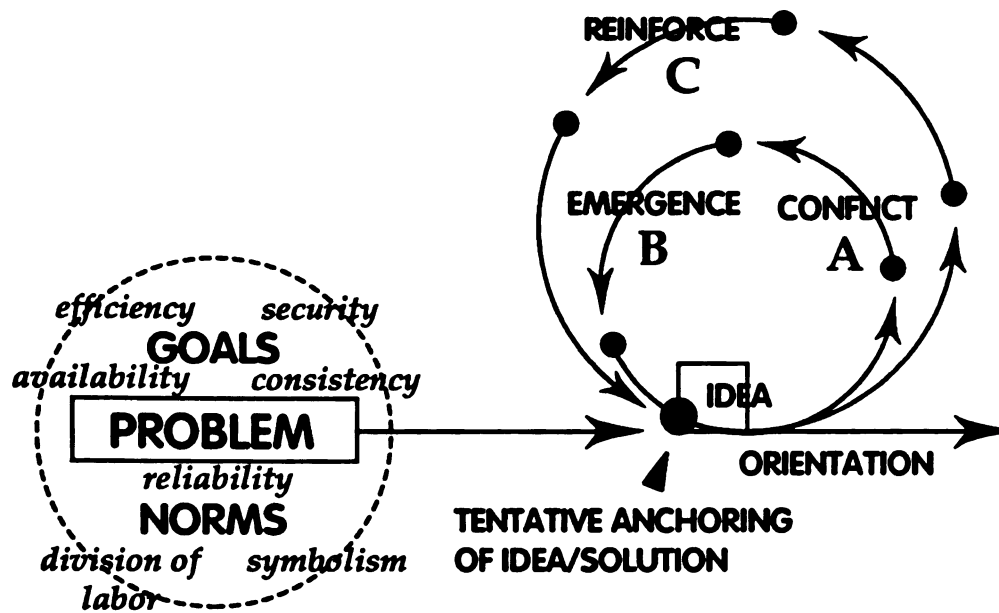


Figure 9: Idea Components of Adapting European Containers Decision-Making Process

1. {
  - A. European containers not always available
  - B. But when they are, they are more durable, efficient
  - C. Use them, when available, in preference to making ceramic vessels
2. {
  - A. European containers don't have decorations which transmit information symbolically
  - B. Encode necessary information on other media
  - C. Durability and efficiency outweigh conflicting criteria
3. {
  - A. Women, as ceramic vessel makers, can utilize the time they would have spent producing pots on other tasks
  - B. Grow more corn for trade, prepare more hides
  - C. Surplus corn and furs can always be traded for more European wares

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identity, and thus social continuity. However, if the suspension of ceramic manufacture is considered through the decision-making process, a different conclusion can be drawn. Individual options to choose metal containers over fired clay pots were based on the efficiency, durability, and availability of the former. If clay vessels were signifiers of group identity at some level, these individuals had the option to have the metal pot and symbolize their group affiliation in another format. This could have been something such as the armorial bearings painted on bark "like a cavalry pennant" as noted by Sagard (Wrong 1939:154). The persistence of the Huron and their clan affiliations is evident from the historic record, suggesting that metal pots were considered superior and it was worthwhile to stop expending energy making inferior clay pots.

Sagard and others noted that the Huron were willing to tip their arrows with whatever point type was available: bone, stone, or iron (Wrong 1939:98; JR 10:265; JR 12:119). This suggests that there was no technological change or preference, but choices made on availability. The native-made hemp cord was known to be too weak to pull in large fish, so the decision to adopt brass wire for use as fishing line was made on the basis of increased efficiency. Likewise, metal fish hooks were available in large quantities through trade (JR 12:119) and superior to wood or bone ones. From initial contact through the mid-eighteenth

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century, the technology for fishing appears to have remained relatively stable, but the material culture with which to pursue this endeavor was modified to accommodate more efficient European materials. References are made throughout the seventeenth and eighteenth centuries that the Huron fished by netting, spearing, and hooking (Thwaites 1950:147-148; Wrong 1939:252-260; Blair 1911:282; Margry 1876 (3):503). Again, the technology did not change, just the material culture with which to undertake it (Wrong 1939:188-189). Despite the decision to use a European item for fishing, the role of the 'fish preacher' remained intact, and taboos about bone disposal were still noted in the historic record. This suggests that the Huron norms were not altered.

The introduction of firearms to the Huron, and the magnitude of the effect on the culture, is a much debated subject (Trigger 1987; Hunt 1940; Eccles 1983; Hunter 1985). The historic record does not note instances where guns were actually traded to the Huron, but there are references to the Huron using firearms and trading for ammunition (Quaife 1962:15; Kellog 1917:58; Hunter 1985; WHC 16:356; JR 34:137; Shea 1880:100; Thwaites 1905:93). Differentiation between the uses of guns indicates that they could be obtained for purposes related to: (1) hunting, (2) warfare, or (3) status. Most gun related discussions focus on the aspect of warfare and superior fire power leading to the Huron dispersal of 1650. Trigger has estimated that the Huron had

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up to only 120 guns by 1650 (1987:633), whereas Hunter concludes that the Huron had many more guns and in sufficient numbers to "at least maintain a nearly equal balance of power with the Iroquois" (1985:1). The 1650 'demise' of the Huron, therefore, according to Hunter, was not due to lack of firepower, but inferior military maneuvers in comparison to the Iroquois. Hunter concludes that 'weapons' equates to 'guns' in the historic references and states that the lack of guns or parts on Huron sites is because the "archaeological data ... is woefully inadequate" (Hunter 1985:5). Not only is Hunter's historical evidence in support of his hypothesis weak and vague, the inadequacy of archaeological data is not a valid assumption, since major portions of two pre-1650 Huron sites have yielded virtually no gun-related materials (Kidd 1943; White 1975; Johnston and Jackson 1980).

Assuming that the Huron did not rely primarily on hunting for food procurement, it can likewise be assumed that large quantities of guns were not required, at least for hunting. The bow and arrow and trapping appear to have been adequate mechanisms for attaining food (and hides, cf. Heidenreich 1971:201-207; Kinietz 1965:20-24). A rise in the diet, comprised by hunting mammals, might stimulate a higher necessity for guns. Therefore, guns would be necessary for either status purposes or warfare. However, documents and site data do not indicate that either of these potential options were ever fulfilled.

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One last subsistence-related topic to be addressed demonstrates that the Huron were capable of making decisions to maintain traditional material culture and technology. Corn, as the main diet staple, was prepared in a multitude of ways (JR 10:103; Champlain 3:125-131). Often, corn kernels needed to be crushed and Sagard recorded the Huron's technology: the mortar is "made of a big tree trunk of maple or other hard wood, cut to measurements, two feet high, hollowed out little by little with charcoals or burning tinder which they keep on it until it is sufficiently wide and deep ..." (Wrong 1939:275). Stones were used during trips to crush the corn kernels. The product was a coarse textured meal and Brebeuf wrote that he tried to get the Huron to use a hand-mill he had brought with him from France. The Huron tried the device but found the corn was ground too fine to use in preparing traditional dishes (JR 8:111). The Huron probably realized that the mill was more efficient in terms of product (Figures 10-11). They decided to retain traditional grinding methods throughout the seventeenth and mid-eighteenth centuries (WHC 17:255; Shea 1880:101; Quaife 1962:13).

### C. Personal Adornment

Long before the arrival of Europeans into the Great Lakes area, the native populations had undoubtedly developed rationale and methods for personal ornamentation. Beads, gorgets, and pendants are found in the Late Ontario Iroquois period archaeological record. There were also undoubtedly

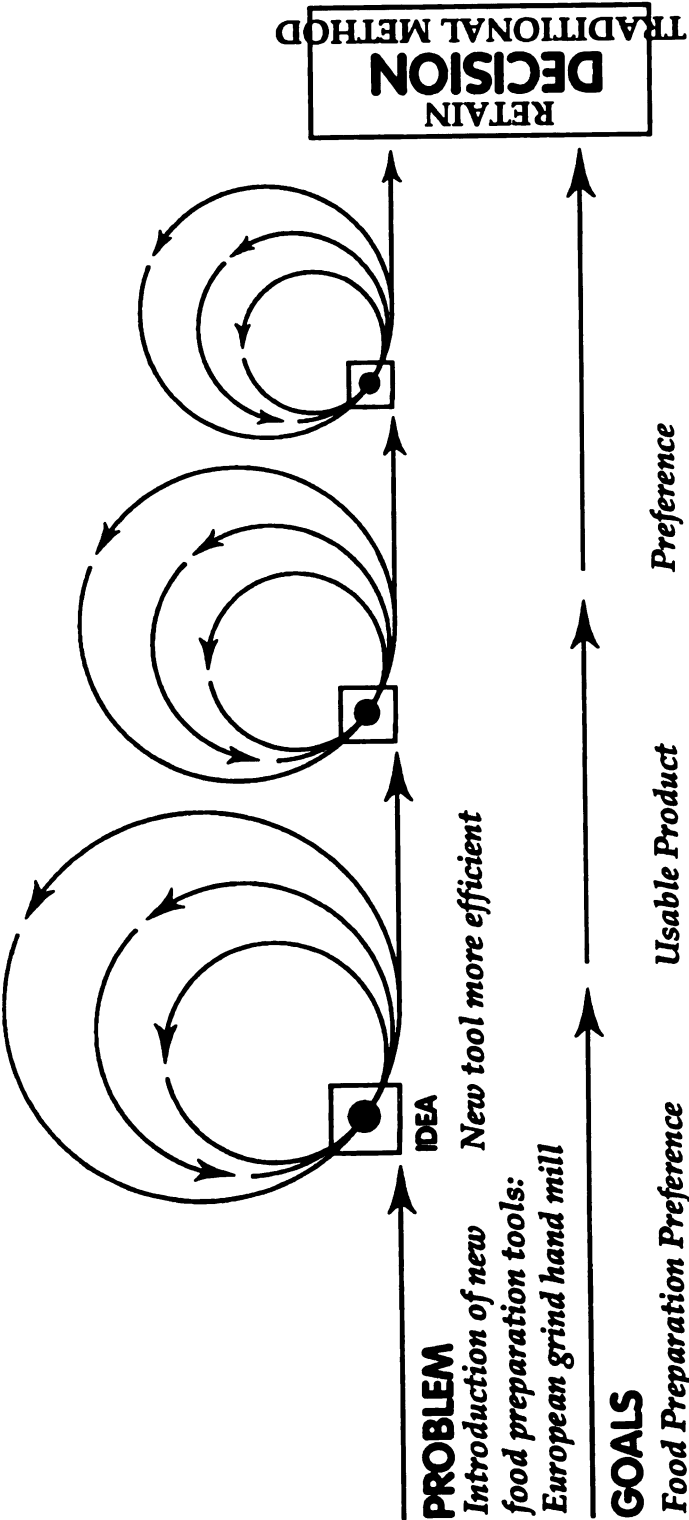


Figure 10: Food Preparation Decision-Making Process





Figure 11:

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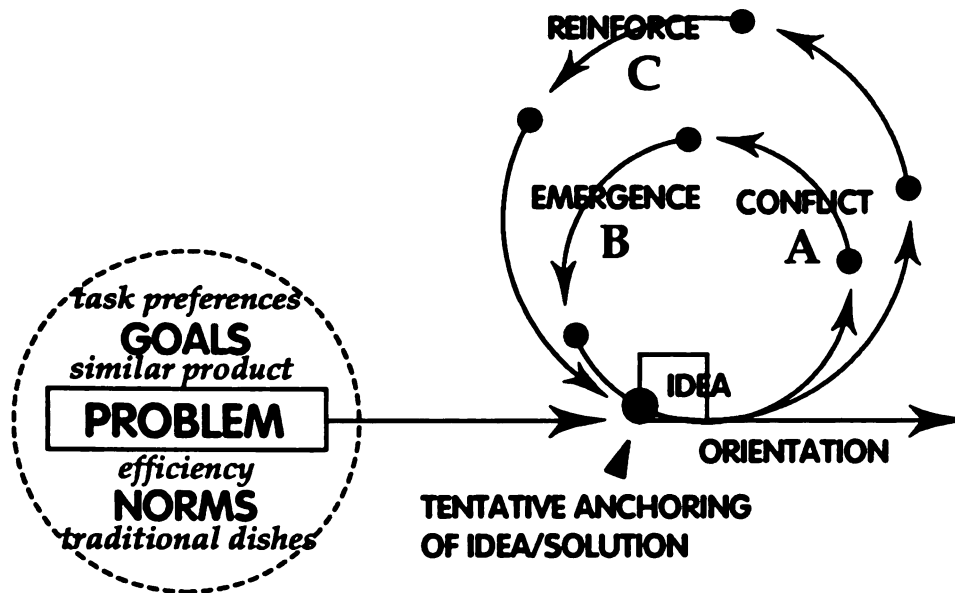


Figure 11: Idea Components of Food Preparation Decision-Making Process

IDEA: European handmill more efficient for grinding grain

1. {
  - A. Produced very fine flour
  - B. Product not suitable for traditional dishes
  - C. Changing all the dishes undesirable
  
2. {
  - A. More time efficient than traditional grinding techniques
  - B. Efficiency not worth loss of desired product
  - C. Adaptation of European handmill considered too disruptive to foodstuffs produced, so rejected despite efficiency

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items for decoration made of perishable material as well. These may have included feather arrangements or body tattoos (JR 38:247-273). Recent research by Hamell (1983) and Miller and Hamell (1986) suggests that the precontact period decorative items, such as shell, crystal, and native copper, were replaced during the contact period with their European counterparts of glass beads and copper. They suggest that 'traditional' items possessed special qualities which were metaphors for light, mind, and knowledge (Miller and Hamell (1986). Miller and Hamell (1986) feel these metaphorical properties were transferred to European goods, making them valuable commodities, though they were only 'trinkets and baubles' to the Europeans. This is manifested in similarities of native terms for berries and seeds (used originally as beads) and European beads (Hamell 1983:8). Hamell's examination of this specific subject provides a credible explanation for the initial reaction of indigenous groups to European beads and copper trinkets, as nonutilitarian items. Perceiving these items within familiar bounds not as new, but as different, European beads and decorative items could be introduced into the existing material culture system with metaphorical meanings transferred as well. Unfortunately, Hamell's (1983) and Miller and Hamell's (1985) insightful analysis of the symbolism and metaphorical properties of European material culture and northeastern indigenous populations is not well

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supported by specific historical narratives pertaining to the Huron. Nevertheless, similarities can be expected.

Decorative items from European origin are noted as eventually replacing indigenous objects. In particular, dyed porcupine quills were replaced with European glass beads of similar color (Wrong 1939:102, 114). Shell wampum is often noted as being valued and used in conjunction with glass beads. The Jesuits' rosaries were likened to wampum by the Huron, particularly the way both groups wore strings of beads around their hips. Nevertheless, the Huron considered their wampum of greater value than the wooden rosaries (Wrong 1939:146). Over 100 years later, many transactions between the Huron and French continued to entail wampum (JR 69:247-253; MPHC 1903:228, 1904:193).

#### D. The Role of Material Culture in Decision-Making

Several historic accounts specify details of the role of material culture in decision-making and support of social norms. Numerous scholars have suggested that Native American populations had an insatiable quest for European items, and thus dependent on access and possession, became 'trade-good-junkies' (Brenner 1988; Brasser 1978). Historic entries can be used to refute this contention and it is suggested that the Huron had a much better grip on the reality of the situation. For instance, in 1645, the Huron decided that the need to trade for European goods was not worth the risk of Iroquois attacks on the trip to Montreal (JR 28:57).

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When faced with the choice of giving up a war captive for a large quantity of axes, blankets, kettles, and arrowheads, the integrity of the Huron warriors was apparent. One of the captains, when offered to participate in this deal, countered, "I am a man of war, and not a trader ... my glory does not consist in bringing back presents, but prisoners" (JR 26:65). Payment to avenge a wrongful death consisted of 'beads of porcelain', a shirt, clothes, gun with powder and balls, and more, each given with a specific significant meaning to appease the aggrieved party (JR 38:281-287). This refutes Mainfort (1979) and Brenner (1988), who suggest that the quest for status, and thus rank, was through acquiring material goods. Here, status came through personal qualities long held valuable, such as honor in warfare (Figure 12-13).

Recalling the context of the La Hontan and Adario dialogue, an insightful view into European material culture and Huron decision-making is afforded. Adario compared traditional goods to European ones, finding the latter far inferior in most regards. Adario 'said' that the Huron had

... lived as well without your Commodities as we do with 'em; for instead of your Fire-Locks, Powder and Shot, they made use of Bows and Arrows, as we do to this day. They made Nets of the Thread of the Barks of Trees, Axes of Stone; Knives, Needles and Awls of Stag or Elk-Bones; and supply'd the room of Kettles with Earthen Pots ... [Thwaites 1905 (2):576].

Continuing his commentary on the state of Huron and French trade relations, Adario said



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... I am of the Opinion, we could dispense with 'em easier than the French could with our Beaver Skins; for which, by a mighty piece of Friendship, they give us in exchange Fusees, that burst and Lamé many of our Warriors, Axes that break in cutting of a Shrub, Knives that turn Blunt, and lose their Edge in the cutting of a Citron; Thread which is half Rotten, and so very bad that our Nets are worn out as soon as they are made; and Kettles so thin and slight, that the very weight of Water makes the Bottoms fall out [Thwaites 1905:576].

#### E. Concluding Remarks: Historical References

References to material culture made by the Europeans in the seventeenth and eighteenth centuries indicate decisions were made within the flexible and fluid context of the Huron culture. Opportunities to acquire French material arose, but were not implemented if individual or group security was at risk, suggesting a rational nature to the process. Choices for the wholesale abandonment of traditional pursuits, such as ceramic manufacture, appear to have been made based on known and shared beliefs, norms, and goals. The technological subsystem was apparently flexible enough to accommodate such an alteration. The Huron did not cease to exist as a viable related group and then subsequently stop the manufacture of pots. The Huron chose to stop this practice because a better option was available, and the significance of ceramic vessels could be transferred elsewhere.

This is not to say that a different case study might not find different reactions under the same set of circumstances. Sharp's (1977) study of the results of Australians' choice to adopt iron axes for stone ones is a

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classic account of system feedback and dislocation. Martin (1975) posits a similar reaction to the introduction of copper kettles into the Micmac system, stimulating critical changes in their entire cultural system<sup>1</sup>. Nevertheless, when addressing culture contact in a decision-making context, the adaptability of culture systems becomes apparent. Hamell's (1983) evaluation of nonutilitarian items in indigenous systemic reactions found that there was "cyclic redefinition of cultural values and meanings ... [and] through such redefinitions cultures are transformed, yet [they] remain true to themselves" (Hamell 1983:23). Sahlins has undertaken a similar approach to evaluating contact in an historical context, finding metaphorical avenues for incorporation, adoption, and explanation of foreign elements (1981). In the case of the Huron, the historic documents reveal particular instances where decisions are processed to adopt European material, if there are benefits to be accrued. If there are negative results or security risks, inclusive options are not implemented. Archaeological evidence relative to this subsystem performance will be presented to evaluate decision-making processes in a material context.

### III. Archaeological Data and Technological Decisions

Material items generally comprise the majority of data derived from archaeological contexts, providing a body of information from which to draw conclusions about cultural behavior. In the case of the Huron, research has been

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undertaken on a variety of site types through time, including villages and burial localities, and the changes in material culture are apparent. The critical factor here is to evaluate what the decisions to change mean to the integrity and operation of the technological subsystem. One of the parameters set on this study was to include only that information which is directly related to the Huron.

Archaeological excavations of historic Neutral sites are bountiful (cf. Dodd 1984; Kenyon 1987; Fitzgerald 1982), yet despite the close linguistic and social relation of the Huron and Neutral, the latter group may have reacted differently to European contact. Direct analogies between the two populations would be tenuous and jeopardize the conclusions to be drawn from decision-making processes. Huron sites to be used as data sources are referenced in Table 1. Relevant artifact information will be summarized in tabular form. Investigation of decision-making processes utilizing information derived from archaeological sites will pursue topics analyzed in the preceding historical discussion concerning technological contexts. In addition, several material culture categories are available which have bearing on this discussion, and for which there is no related historical information.

#### A. Subsistence-Related Decisions

The following discussion will be limited to subsistence-related technological aspects of Huron site

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Table 1: Huron Archaeological Sites

| SITE                     | TEMPORAL POSITION | REFERENCE                                                    |
|--------------------------|-------------------|--------------------------------------------------------------|
| Nodwell                  | mid 14th century  | Wright (1974)                                                |
| Draper                   | 15th century      | Finlayson (1985);<br>Hayden (1982)                           |
| Baumann                  | A.D. 1460         | Stopp (1985)                                                 |
| Woodbridge<br>(McKenzie) | A.D. 1510-1530    | Emerson (1954);<br>Johnson (1980);<br>Saunders (1986)        |
| Robin Hood               | A.D. 1500-1550    | Williamson (1983)                                            |
| Ball                     | A.D. 1590-1600    | Knight (1978); Knight<br>and Melbye (1983);<br>Melbye (1983) |
| Ossonane                 | A.D. 1620-1640    | Kidd (1953)                                                  |
| Auger                    | A.D. 1620-1640    | Latta (1983, 1985)                                           |
| LeCaron                  | A.D. 1630-1650    | Johnston and<br>Jackson (1980)                               |
| Hamilton                 | A.D. 1640-1650    | Latta (1988)                                                 |
| St. Ignace<br>(Michigan) | A.D. 1671-1705    | Branstner (1984,<br>1985, 1986, 1987)                        |



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assemblages. Within this context, food procurement tools and food preparation items will be summarized. It is anticipated that alterations of subsistence-related items will reflect decisions concerning subsystem contexts, such as settlement preference, trade networks, and options for acquiring material items. Discussion will be organized by site and will be chronological in order.

Within the concept of technology, at the Nodwell site<sup>2</sup> archaeological evidence suggests that the occupants chose to settle in the area for subsistence-related reasons, as well as for its advantageous location in the intergroup trade network. Faunal analysis of recovered specimens reveals a diet composed of a variety of fish species, supplemented by mammals. Statistical analysis between house structures indicates that the diet composition was similar throughout the village, with techniques for food preparation also found to vary little (Wright 1974:279-290). Floral specimens are poorly preserved at the site, but do suggest a reliance on corn, augmented by a diverse array of collectable wild plants.

A striking feature of most Huron site assemblages is the paucity of projectile points of stone or bone. At Nodwell (Table 2), there are few points, with the lithic assemblage comprised primarily of scraping tools. It is suggested that the secondary reliance on mammals as food is reflected by the lack of hunting implements at Nodwell.

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Table 2: Nodwell Site Artifact Assemblage<sup>1</sup>

| Artifact                         | Quantity | Percentage        |
|----------------------------------|----------|-------------------|
| CERAMICS (78.0%) <sup>2</sup>    |          |                   |
| Vessels <sup>3</sup>             | 451      | 11.0 <sup>4</sup> |
| Sherds                           | 3192     | 78.0              |
| Juvenile                         | 238      | 6.0               |
| Refuse                           | 190      | 5.0               |
| PIPES (4.8%)                     |          |                   |
| Bowls                            | 92       | 36.0              |
| Stem/bowl fragments              | 166      | 64.0              |
| STONE TOOLS <sup>5</sup> (12.0%) |          |                   |
| Scrapers                         | 138      | 23.0              |
| Wedges                           | 75       | 13.0              |
| Anvil/hammers                    | 101      | 17.0              |
| Projectile points                | 14       | 2.0               |
| Abraders                         | 74       | 12.0              |
| Misc.                            | 163      | 27.0              |
| Ochre                            | 34       | 6.0               |
| SHELL (0.2%)                     |          |                   |
| Polishers                        | 6        | 67.0              |
| Beads                            | 2        | 22.0              |
| Pendants                         | 1        | 11.0              |
| BONE (5.0%)                      |          |                   |
| Deer toe bones                   | 45       | 17.0              |
| Awls                             | 93       | 35.0              |
| Beads                            | 52       | 19.0              |
| Beaver <sup>6</sup> incisors     | 12       | 4.0               |
| Misc.                            | 53       | 20.0              |
| Points                           | 14       | 5.0               |

<sup>1</sup> From Wright (1974), includes Houses 1-12, midden, pits, and plowzone.

<sup>2</sup> Percentages calculated by group from entire assemblage.

<sup>3</sup> Vessels calculated by 5 rims per vessel average.

<sup>4</sup> Percentages calculated within each material culture group.

<sup>5</sup> Category does not include debitage counts.

<sup>6</sup> Includes one beamer and 3 bracelets.

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Concerning fired-clay ceramics, Wright concludes from the Nodwell collection that the vessel motif types are extremely variable throughout the site, with several houses containing vessels reflecting more progressive change than others (Wright 1974:230-232), based on demonstrated vessel shape, style, and decoration change through time. Wright accounts for this by suggesting a long-term occupation for the site, which would have allowed for the gradual changes to have occurred. The documented intra-village variability over the course of several decades, is indicative of the flexible nature of Huron material culture. Styles, shapes, and motifs change and the manufacturing techniques may be refined, but the underpinning technology does not have to be altered.

At the fifteenth century Draper site, Finlayson summarizes preliminary counts of materials collected from 1975 and 1978 excavations (1985:52-53,65). This material is summarized in Table 3 for purposes of this discussion. As Finlayson's study is oriented towards settlement concerns and provides only brief treatment of artifacts, only presence/absence of materials can be discussed. There is a consistent lack of hunting-related tools present in the assemblage, with scrapers again occurring in comparatively high numbers. An apparent alteration between the fourteenth century Nodwell and fifteenth century Draper Huron collections is the rise in unique special-purpose artifacts in the latter assemblage. The worked bone and stone items

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Table 3: Draper Site Artifact Assemblage<sup>1</sup>

| Artifact                  | Quantity             | Percentage <sup>2</sup> |
|---------------------------|----------------------|-------------------------|
| CERAMICS (96.0%)          |                      |                         |
| Vessel <sup>4</sup>       | 27,925. <sup>3</sup> | 18.2                    |
| Sherds <sup>4</sup>       | 122,440.             | 80.0                    |
| Juvenile pots             | 3,483.               | 2.3                     |
| Refuse                    | 53.                  | 0.04                    |
| PIPES <sup>5</sup> (2.0%) | 3,709.               | 100.0                   |
| STONE (2.0%)              |                      |                         |
| Scrapers                  | 408.                 | 16.0                    |
| Wedges                    | -                    | -                       |
| Anvils                    | 70.                  | 3.0                     |
| Points                    | 132.                 | 5.0                     |
| Abraders                  | 228.                 | 9.0                     |
| Misc.                     | 1,754.               | 68.0                    |

<sup>1</sup> Tabulated from Finlayson (1985).

<sup>2</sup> Percentages derived from within each artifact category, not between entire site assemblage. Large number of ceramic sherds invariably skews any assemblage percents.

<sup>3</sup> Even using 10 rims per vessel as an average, the estimated vessel count for this site is extremely high.

<sup>4</sup> Includes 1039 castellations and 63 handles, which may provide a more accurate estimate of number of vessels.

<sup>5</sup> No differentiation between stems and bowls is listed.



Table 4: Baumann Site Artifact Assemblage<sup>1</sup>

| <u>Artifact</u>           | <u>Quantity</u> | <u>Percentage</u> |
|---------------------------|-----------------|-------------------|
| <b>CERAMICS (97.0%)</b>   |                 |                   |
| Rims                      | 384             | 7.5               |
| Body                      | 4617            | 91.24             |
| Clay lumps                | 3               | 0.06              |
| Juvenile                  | 61              | 1.2               |
| <b>PIPES (1.0%)</b>       |                 |                   |
| Lalonde Trumpet           | 4               | 33.3              |
| Barrel                    | 5               | 42.5              |
| Incised trumpet           | 2               | 16.0              |
| Misc.                     | 1               | 8.2               |
| Stems                     | 15              |                   |
| <b>STONE TOOLS (1.0%)</b> |                 |                   |
| Misc.                     | 12              | 36.4              |
| Flakes (scrapers?)        | 19              | 57.6              |
| Bead                      | 1               | 3.0               |
| Projectile point          | 1               | 3.0               |
| <b>BONE (1.0%)</b>        |                 |                   |
| Beads                     | 31              | 64.6              |
| Awls                      | 6               | 12.5              |
| Points                    | 3               | 6.2               |
| Misc.                     | 1               | 2.1               |
| Deer-toe bones            | 7               | 14.6              |
| <b>COPPER (0.4%)</b>      |                 |                   |
| Misc.                     | 1               | 50.0              |
| Bead                      | 1               | 50.0              |

<sup>1</sup> From Stopp (1985).

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are diverse, spanning the range of nonutilitarian and utilitarian goods. Ceramics are well represented across the site, and grain grinding tools are present at both Nodwell and Draper.

Excavations at the fifteenth century Baumann site yielded a collection of material culture with as little diversity as Nodwell (Table 4). The stone and bone assemblages are sparsely represented in quantity or kind. Projectile points are no more prevalent than at the other sites, but a possible aberration in the pattern is the complete lack of scrapers and wood-working tools. The unifacial flake complex may have functioned as scraping tools. No culturally-oriented explanation can be offered, but this paucity of scraping tools may reflect the sparse excavation coverage, or bias in nomenclature of tools<sup>3</sup>.

Ceramic vessel motifs at Baumann have been characterized as "highly evolved ... where intricate combinations of trailing, incising, and punctating are executed with neither haste nor waiver" (Stopp 1985:22). As well as displaying care in manufacture and decorative elaboration, many motifs at Baumann were found to be unique for the period. Latta (1976:55-78) observed a similar pattern at contemporaneous sites, concluding that

... this indicates a considerable amount of individual independence in ceramic decoration, and whether these unique motifs are lineage markers, representing the social patterns of the potter, or whether they simply indicate the social desirability of artistic variability, they suggest that ceramic decoration was a meaningful culture trait which merited careful attention and which probably indicates a reasonably

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high social valuation of the craft itself [Latta 1976:78].

As indicated by Latta, variability of motifs may or may not reflect social differentiation (on a horizontal plane). It does, however, suggest that the variety of motifs was used to reflect some individualness, even if it was only to express artistic or creative ability.

The Baumann floral and faunal collections indicate a continued reliance on agricultural products and fish as the main dietary staples. Corn, beans, and squash are present, as well as wild plant specimens<sup>4</sup>. Utilization of plants, particularly corn, should have a concomitant representation of grain preparation tools, such as grinding platforms, anvils, or anvil-hammers. As this does not occur at Baumann, sampling error may again be the explanation.

The diversity in fish species size is thought to indicate random collection in weirs or nets. This may account for the lack of fishing implements (Stopp 1985:26). Canis sp. and white-tailed deer are well represented, and whereas the latter was undoubtedly a valuable food resource, the high percentage of the former suggests that it was utilized for a variety of functions besides a food type, including rituals and feasts.

In a comparison of Huron site faunal assemblages, Park (1981) suggests that there was a significant decrease in utilization of fish from the precontact period to contact period in overall dietary composition. Comparing the fifteenth century Baumann and Methodist Point collections to

the early 1600s Ball and Cahiague sites, Park notes a marked decrease in fish remains through time, concluding that corn consumption may have increased during the contact period. This would seem to be an unlikely and unhealthy decision to make, with no rational foundation. A feasible explanation for this change, however, is a sampling error, where recovery methodologies did not collect fish remains at a consistent rate. This is particularly applicable to the Cahiague site, which was excavated/collected several decades ago.

The Woodbridge or McKenzie site has been dated to A.D. 1520  $\pm$  10/15 years (Johnson 1980:77), and is representative of the Southern Division of the Huron/Petun Branch of the Late Ontario Iroquois period. No individual artifact information is available, so it is not presented in tabular form. Ceramic vessels at the site comprise a varied assemblage, suggesting inter-group trade of pots, people and motifs.

The lithic assemblage collected from the McKenzie site has been noted for its prolific chipped stone industry, particularly scraping tools (Ramsden 1977:272). Although some scholars (W. Fox, 1989 personal communication; T. Conway, 1989 personal communication) see the proliferation of stone tools on Huron sites as evidence for Ottawa manufacture and trade of these items to the Neutral, and then to the Huron, or the presence of Neutral men on Huron sites (Johnson 1980:86), the manufacture and use of scraping

tools by the Late Ontario Iroquois period Huron is characterized by persistence and continuity, and not a spontaneous introduction. The Ottawa may have obtained the chert from the Neutral. The mere presence of Onondaga chert, formed into tools at Huron sites, is not persuasive evidence for the aforementioned Neutral role<sup>5</sup>.

The Robin Hood site (Williamson 1983) is an A.D. 1550-1550 Southern Division Huron site, with a suggested seasonal occupation related to summer agricultural pursuits<sup>6</sup>.

Numerous precontact agricultural fields have been interpolated from the presence of modern-day pine stands, with the Hood site located in the southwest quadrant of a large field. Corn, beans, and tobacco were located in the features at the site, with a greater reliance on a variety of wild plants. This is accounted for by the proposed summer occupation of the site, when the previous year's store of seed and food corn would be virtually exhausted, mandating the exploitation of abundantly available summer wild plants (Williamson 1983:38-39). Faunal specimens are limited but suggest a reliance on fish and a variety of medium-sized mammals.

Tools which can be associated with food preparation were located at the Robin Hood site (Table 5) and the trend continues for the preponderance of scrapers, paucity of projectile points and some variety of ceramic motifs. Nevertheless, very few ceramic vessels are represented,

Table 5: Robin Hood Site Artifact Assemblage<sup>1</sup>

| Artifact                   | Quantity | Percentage |
|----------------------------|----------|------------|
| CERAMICS (33.0%)           |          |            |
| Rims                       | 21       | 36.0       |
| Sherds                     | 37       | 64.0       |
| PIPES (8.0%)               |          |            |
| Iroquois ring              | 1        | 7.0        |
| Horizontal lines           | 1        | 7.0        |
| Horizontal lines/punctates | 1        | 7.0        |
| Plain bowl                 | 1        | 7.0        |
| Misc.                      | 2        | 14.0       |
| Stems                      | 8        | 57.0       |
| STONE (53.0%)              |          |            |
| Abrader                    | 2        | 2.0        |
| Celts                      | 16       | 17.0       |
| Hammer                     | 2        | 2.0        |
| Points                     | 3        | 3.0        |
| Scrapers                   | 14       | 15.0       |
| Wedges                     | 6        | 7.0        |
| Utilized flakes            | 36       | 39.0       |
| Misc. tools                | 13       | 15.0       |
| BONE (6.0%)                |          |            |
| Beaver incisors            | 3        | 30.0       |
| Deer toe bones             | 1        | 10.0       |
| Bead                       | 1        | 10.0       |
| Scrapers                   | 2        | 20.0       |
| Misc.                      | 3        | 30.0       |

<sup>1</sup> From Williamson (1983).



considering the fact that four houses were located. This dearth of pots may be attributable to the excavation methodology implemented at Robin Hood. Excavations were apparently undertaken in an effort to locate structures and investigation of interior/exterior house areas were not the primary focus. This may have resulted in limited collections from the anticipated densest artifact-bearing areas. The paucity of ceramics may also be associated with the agriculturally-oriented site function, where ceramics may not have been utilized to the extent as at large villages.

The special function of the Robin Hood site as a hamlet occupation, associated with agricultural tasks, suggests that variances in artifact composition might be expected between site types. This potential for skewing could be due to the higher amount of time spent by women tending fields, or the summer occupation and related seasonal subsistence differentiations. Nevertheless, general trends in the subsistence-related material culture are reflected in the archaeological record, including dietary reliance and/or preference for fish and corn, and the manufacture of food procurement/preparation lithic implements. It is suggested that the special purpose site collections would offer the opportunity to investigate decision-making processes under a unique set of circumstances, differing from those experienced at the main village. Toward that end, the subsistence-related choices appear to have been derived from

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the overall cultural set of norms and goals, without any significant aberrations noted.

The Ball site<sup>7</sup> falls within the temporal protohistoric period, characterized by indirect influences and flow of European trade goods (Table 6). Ceramic evidence is most closely related to Petun types, in style and frequency. Likewise, a significant quantity of 'foreign' vessel types were located, suggesting interaction with distant groups. The faunal assemblage indicates a continued reliance on small river fish species, supplemented with dog, deer, and beaver. Kettle scrap has been fashioned into projectile points, and there is a continuance in lithic and groundstone tool manufacture. This protohistoric site does not provide evidence of any major disruptions due to the indirect flow of trade goods into the native system.

Despite the fact that a great deal of scholarly attention has been paid to the historic Huron, emphasis has been on interpretations from historical documents, not from a synthesis of archaeological collections. Much of the archaeological evidence from historic Huron sites has been derived from late nineteenth and early twentieth century landowner collections and the data is not considered to be reliable for comparative purposes. Few historic Huron sites have been systematically and scientifically excavated and/or analyzed. The four sites considered to have been reliably collected, Ossonane, Auger, Le Caron and Christian Island, span the Ontario Huron contact era from A.D. 1615 to 1650.

Table 6: The Ball Site Artifact Assemblage<sup>1</sup>

| <u>Artifact</u>    | <u>Quantity</u> |
|--------------------|-----------------|
| CERAMICS           | presence noted  |
| PIPES <sup>2</sup> | 25              |
| STONE TOOLS        |                 |
| Misc.              | 93              |
| Hammerstone        | presence noted  |
| BONE               |                 |
| Beads              | 6               |
| COPPER             |                 |
| Beads and points   | 75              |
| GLASS              |                 |
| Beads              | 5               |
| IRON               |                 |
| Celt               | presence noted  |
| Misc.              | 3               |

<sup>1</sup> From Knight (1978).

<sup>2</sup> Pipe types include Huron collared ring, ring bowl, plain, and trumpet.

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The collection from Ossonane yields little evidence to discuss subsistence-related topics. No ceramics, nor floral or faunal specimens, were located in the ossuary (Table 7). Several European objects may have functioned similarly to precontact traditional items: copper kettles as fired-clay pots or iron knives as chipped stone scrapers. The assemblage does not appear to reflect the complete gamut of Huron material culture. The placement of more European items than native-made in the grave lots argues for the importance of the former along ideological rather than technological lines. Nevertheless, the concept that European goods were placed in graves in bulk quantities so that their souls could join the souls of previously deceased Huron, is a plausible and worthwhile explanation for the rational and decision-making process underlying this behavior.

Subsistence-related tools are sparse at the 1620-1640 Auger site (Latta 1983)<sup>8</sup>. This dearth cannot be attributed to field methodology, since block excavations focused on removal of entire houses. The lithic and bone tools relevant to this discussion are listed in Table 8. It is apparent that European trade goods have not overwhelmed the traditional material culture, but transitions are apparent. In particular, iron knives appear to have been preferred over chipped stone tools. Most of the knives show evidence of modification. Five blades have been bent and may have functioned as fish scalers (Latta 1983:114). Several blade

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Table 7: Ossoonane Site Artifact Assemblage<sup>1</sup>

| Artifact                  | Quantity | Percentage |
|---------------------------|----------|------------|
| PIPES (0.1%)              |          |            |
| Elbow, ventrical grooves  | 1        | 50.0       |
| Vasiform, stone           | 1        | 50.0       |
| STONE (0.2%)              |          |            |
| Gaming piece              | 1        | 20.0       |
| Projectile points         | 4        | 80.0       |
| Catlinite beads           | presence | -          |
| Slate beads               | presence | -          |
| SHELL (73.0%)             |          |            |
| Beads strung together     |          |            |
| Wampum, cylindrical       | 1221     | 81.0       |
| Wampum, discoidal         | 228      | 15.0       |
| Wampum, tubular           | 45       | 3.3        |
| Pendants                  | 5        | 0.3        |
| BONE (0.5%)               |          |            |
| Pendant                   | 1        | 100.0      |
| COPPER (1.0%)             |          |            |
| Beads                     | 18       | 64.0       |
| Bangle                    | 1        | 4.0        |
| Kettles (fragments)       | 2-3      | 11.0       |
| Rings                     | 6        | 21.0       |
| GLASS (23.0%)             |          |            |
| Beads                     | 467      | 99.9       |
| Magnifying glass          | 1        | 0.05       |
| Wine glass stem           | 1        | 0.05       |
| IRON (2.0%)               |          |            |
| Knives                    | 25       | 58.0       |
| Scissors                  | 1        | 2.0        |
| Keys                      | 1        | 2.0        |
| Awls                      | -        | -          |
| Bracelets                 | 15       | 35.0       |
| Hook                      | 1        | 2.0        |
| MISCELLANEOUS             |          |            |
| Birch bark basket remains |          |            |
| Hemp and rope             |          |            |
| Beech nuts                |          |            |
| Beaver pelts, textiles    |          |            |
| Red ochre, pigments       |          |            |

<sup>1</sup> From Kidd (1953).



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Table 8: Auger Site Artifact Assemblage<sup>1</sup>

| <u>Artifact</u>         | <u>Quantity</u> | <u>Percentage</u> |
|-------------------------|-----------------|-------------------|
| <b>CERAMICS (98.0%)</b> |                 |                   |
| Rims                    | 831             | 5.0               |
| Body                    | 14,305          | 94.0              |
| Juvenile                | 23              | 0.2               |
| <b>PIPES (0.5%)</b>     |                 |                   |
| Bowls                   | 32              | 42.0              |
| Stems                   | 45              | 58.0              |
| <b>STONE (0.1%)</b>     |                 |                   |
| Projectile points       | 2               | 13.0              |
| Scrapers                | 2               | 13.0              |
| Grindstones             | 8               | 53.0              |
| Adzes                   | 3               | 20.0              |
| <b>BONE (0.2%)</b>      |                 |                   |
| Needles/awls            | 6               | 21.0              |
| Beads                   | 15              | 54.0              |
| Misc.                   | 7               | 13.0              |
| <b>SHELL (0.2%)</b>     |                 |                   |
| Beads                   | 34              | 100.0             |
| <b>COPPER (0.24%)</b>   |                 |                   |
| Points                  | 7               | 19.0              |
| Tubes/cones             | 4               | 11.0              |
| Kettle fragments        | 26              | 70.0              |
| <b>GLASS (0.27%)</b>    |                 |                   |
| Beads                   | 42              | 100.0             |
| <b>IRON (0.23%)</b>     |                 |                   |
| Knives                  | 18              | 55.0              |
| Misc.                   | 12              | 36.0              |
| Scrap                   | 3               | 9.0               |
| Axes                    | 3               | 9.0               |

<sup>1</sup> From Latta (1983).

tips have been broken off and the edges beveled, suggesting analogous use as end scrapers. Although lithic projectile points were never abundant on precontact or early contact sites, the emergence and preference for brass points is evident. The increased need for points for hunting is reflected by the increase in exploitation of fur-bearing mammals, probably for trade purposes (i.e., beaver, bear, deer), although these species were just as likely to have been trapped as shot with a bow and arrow. Few tools which can be associated with fishing were located (i.e., harpoons, hooks), which may be accounted for by an emphasis on net or weir fishing in nearby rivers. The exploitation of small riverine fish, such as yellow perch, supports this contention, although the sample size is quite small and caution in interpretation is warranted.

Floral remains collected from flotation samples reveal a continuation through time on the emphasis for agricultural products, supplemented with a variety of wild plants. Tools for clearing fields include stone and iron axes, and food preparation grinding stones are well represented in the lithic assemblage. Ceramic vessels comprise the majority of the Auger site assemblage. Nearly 80% of the collection consists of 'Huron Supertype' ceramics, with the remaining portion of the collection including 'foreign' vessel types, considered by Latta to reflect the importation of pots, and not the potters (Latta 1983:61). Kettles and items made out of recycled kettles are poorly represented at the site.

Latta's analysis of the site settlement and assemblage has led her to the conclusion that the village was occupied "during the period of Jesuit mission activity, 1635-1649" (Latta 1983:129). If this is correct, the assemblage does not reflect a dependence on trade goods for such a late date in the contact period, nor any particular preference for European materials over traditional items. One exception to the preference issue would be the presence of a substantial quantity of iron knives, the majority of which indicate modification for a new function. This behavior exemplifies the decision-making processes in a context of adaptability.

Turning briefly to the 1630-1650 Le Caron site<sup>9</sup>, a material culture distribution pattern similar to Auger is noticeable (Johnston and Jackson 1980). Although frequency of goods collected are not enumerated, the European assemblage includes (in order of frequency), glass beads, knife blades, axes, kettle fragments, iron awls, lead shot, Jesuit rings, copper tokens, two spoons, one European ceramic sherd. Stone tools, clay vessels and pipes, floral and faunal remains are noted as items of native origin. The trade items noted appear to be standard fare at the 1620-1650 sites and they are consistently found in conjunction with native-made goods. Review of the general artifact categories (native versus European origin) of 326 features at Le Caron indicates that European goods are sparsely scattered across the site. Features with only European items comprised 2%, whereas features with only native-made

items comprised 31% of the sample. Nearly 4% of the features contained both native-made and European items. None of these early contact period sites have contained gun parts or related materials. Overall, this suggests that the knowledge about the reliability and availability of native goods provided security. Issues of preference and availability also orient decisions of acquisition.

After the 1649-1650 diaspora of the Huron, no archaeological sites conclusively related to Huron occupation are known for the 1650-1670 period<sup>10</sup>. The archaeological excavations at St. Ignace, Michigan have revealed remains of the 1671-1705 Tionontate Huron occupation (Stone 1971; Fitting 1976, 1980; Branstner, 1984, 1985, 1986, 1987). The conclusion that this archaeological site is the location of the Tionontate Huron village is based on diagnostic Iroquoian-like artifacts, village size<sup>11</sup>, and geographic location in conjunction with geological features that govern options for village placement.

The material culture assemblage at the St. Ignace village differs considerably in quantity and variety of items collected (Table 9)<sup>12</sup>. This can be attributed to several factors. First, the occupation span is known to have been two to three times longer at St. Ignace (30+ years) than the average in Huronia (10-12 years), suggesting that site deposits at St. Ignace might be denser<sup>13</sup>. Second,

Table 9: St. Ignace Huron Village Site Artifact Assemblage<sup>1</sup>

| <u>Artifact</u>         | <u>Quantity</u> | <u>Percentage</u> |
|-------------------------|-----------------|-------------------|
| <b>CERAMICS (12.0%)</b> |                 |                   |
| Rims                    | 18              | 2.0               |
| Body                    | 758             | 97.0              |
| European sherds         | 3               | 1.0               |
| <b>PIPES (1.0%)</b>     |                 |                   |
| Bowls                   | 25              | 38.0              |
| Stems                   | 27              | 41.0              |
| European stems          | 14 <sup>2</sup> | 21.0              |
| <b>STONE (6.0%)</b>     |                 |                   |
| Projectile points       | 23              | 6.0               |
| Scrapers and flakes     | 22              | 6.0               |
| Grinding platforms      | 32              | 9.0               |
| Anvils                  | 15              | 4.0               |
| Catlinite beads         | 140             | 39.0              |
| Catlinite fragments     | 53              | 15.0              |
| Sandstone pendant       | 1               | 0.3               |
| Gunflints               | 74              | 21.0              |
| <b>BONE (2.0%)</b>      |                 |                   |
| Harpoons                | 21              | 17.0              |
| Mat needles             | 12              | 9.0               |
| Awls                    | 12              | 9.0               |
| Points                  | 7               | 6.0               |
| Needles                 | 6               | 5.0               |
| Sucking tubes           | 5               | 4.0               |
| Leister prong           | 1               | 1.0               |
| Combs                   | 7               | 6.0               |
| Bracelets               | 6               | 5.0               |
| Gaming pieces           | 8               | 6.0               |
| Effigies                | 3               | 2.0               |
| Rosary beads            | 38              | 30.0              |
| <b>SHELL (7.0%)</b>     |                 |                   |
| Beads                   | 17              | 3.0               |
| Wampum                  | 448             | 96.0              |
| Gorgetts                | 3               | 1.0               |

Table 9 (cont'd)

## COPPER (5.0%)

|                |        |      |
|----------------|--------|------|
| Bracelets      | 3      | 1.0  |
| Tinkling cones | 192    | 57.0 |
| Hawks bells    | 10     | 3.0  |
| Crosses        | 6      | 2.0  |
| Pendants       | 10     | 3.0  |
| Rings          | 45     | 13.0 |
| Kettles        | 1      | 0.3  |
| Kettle lugs    | 10     | 3.0  |
| Straight pins  | 20     | 6.0  |
| Points         | 3912.0 |      |
| Harpoon        | 1      | 0.3  |

## GLASS (61.0%)

|                        |      |      |
|------------------------|------|------|
| Pendants               | 3    | 0.07 |
| Bottle glass fragments | 50   | 1.0  |
| Beads                  | 3824 | 98.0 |
| Projectile point       | 1    | 0.03 |

## IRON (3.0%)

|                    |       |           |
|--------------------|-------|-----------|
| Knives             | 38    | 19.0      |
| Knife fragments    | 18    | 9.0       |
| Axes               | 3     | 1.0       |
| Awls and fragments | 20/18 | 10.0/9.0  |
| Needles and frags. | 20/51 | 10.0/25.5 |
| Gun parts          | 11    | 5.0       |
| Fish hooks         | 13    | 6.0       |
| Projectile points  | 9     | 4.0       |
| Harpoon            | 1     | 0.5       |

## LEAD (2.0%)

|              |     |      |
|--------------|-----|------|
| Shot         | 110 | 85.0 |
| Musketballs  | 12  | 9.0  |
| Pendant      | 1   | 1.0  |
| Fish weights | 6   | 5.0  |

<sup>1</sup> From Branstner (1984, 1985, 1986, 1987).

the St. Ignace Huron village was adjacent to a French fur trade post, Fort du Buade. This created a situation markedly different for the accessibility and available quantity of trade materials than was ever an option in Huronia.

Evidence for subsistence-related material includes the presence of kettles, grinding tools, field clearing implements, fishing and hunting items, and floral and faunal specimens. Numerous historic references point out the excellent fishing opportunities available at the Straits of Mackinac, with fish taken by spearing, netting, and hooking. The Huron left behind ample archaeological evidence found in context which indicates they had a continued reliance on fish as a dietary staple.

The material culture remains include a mix of European and traditionally-made items, such as iron fish hooks, lead net or line weights, and a bone leister prong. The availability of iron tools appears to have allowed for a fluorescence in the manufacture of high quality bone tools, such as harpoons. The large lake fishing opportunities may have resulted in some alteration of the techniques used for procurement from the riverine settings in Huronia. At St. Ignace, there is the presence of carved bone harpoons in a significantly larger number than that found on earlier sites. The spearing technology is also represented by material culture in transition. A European iron sword blade and a piece of kettle brass have been reworked into Huron-



style harpoons. Much of the material culture represented in the St. Ignace collection is listed in La Hontan's journal (Table 10), including "sword-blades to make Darts of" (Thwaites 1905:377-378). Faunal analysis (Smith 1988) indicates that lake trout, sturgeon, and whitefish comprised a prevalent part of the diet.

Evidence from the 1988-1989 monitoring of construction through the midden outside of the village occupation area indicates that the 1983-1986 interior village excavations yielded a faunal sample biased towards a high frequency of fish. The exterior midden was an area of disposal of large mammal bones. In contrast, the inter-village area has a ratio of boney fish to mammal remains at 6.0:5.1, whereas the exterior midden has a ratio of 3.4:1.0. The midden data indicates that large mammals were exploited at St. Ignace, although hunting tools are not well reflected in the material culture assemblage. In addition, the St. Ignace faunal assemblage also indicates a more intensive and diversified exploitation of areas from the Ontario Huron sites. Thus, the increase in Huron-French interactions through the first three-quarters of the seventeenth century suggests a continued reliance on customary subsistence resources and a fluorescence in production of food groups which could be turned into 'currency' for trade. The Huron were apparently not reliant on fur trade posts for provisions, which is in opposition to conclusions drawn by

Table 10: La Hontan's 1680s Trade Goods List<sup>1</sup>

Short and Light Fusees

Powder

Ball and cut Lead or Small-shot

Knives with their Sheaths

Sword-Blades to make Darts of

Kettles of all sizes

Shoomakers Awls

Fish-hooks, of all sizes

Flint Stones

Caps of blew Serge

Shirts made of the common Brittany Linen

Woolsted Stockins, short and coarse

Brazil Tobacco

Coarse white Thread for nets

Sewing Thread of several colours

Pack-Thread

Vermillion

Needles, both large and small

Venice beads

Some Iron Heads for Arrows, but few of 'em

A small quantity of Soap

Brandy goes off incomparably well.

<sup>1</sup> From Thwaites (1905:377-378).

Bishop and Ray (1976), Heidenreich and Ray (1976), Brasser (1978), and Mason (1988).

The effects of owning guns towards altering native subsistence practices and life style has been discussed by several authors (Yerbury 1986:20, 49-50; Hunt 1940; Bailey 1937; Ray 1974; Rich 1958; Martin 1975). These studies conclude that natives relied heavily on guns obtained through trade, and when they did not have access to guns or gun repair, the ability to procure food potentially became jeopardized (Ray 1974:72-73, 78-79). Other studies suggest the opposite, and conclude that guns were not necessarily the optimum hunting weapon, nor were guns always reliable in cold or wet weather (Hughes 1975; Gillespie 1976; Smith 1975; VanStone 1976; Slobodin 1962). Likewise, flintlocks were not easy to maintain and repair, and access to guns in trade was often related to the profession of conversion to Christianity (Trigger 1987).

A minimum of two guns are represented in the St. Ignace collection, although gunflints are ubiquitous across the site (1 gunflint for every three features). No lead ball casting spur or molds have been collected in context, and musketballs are sparse. Lead shot collected would have comprised 1-2 rounds of ammunition. Assuming that the three known nearby contemporaneous Native American burial grounds are related to the Huron activities in the Straits region, there is a similar dearth of firearms and related parts. The Lasanen site yielded no gun parts and 8 spalls (Table

11, Cleland 1971). Gros Cap yielded one gun barrel fragment and 5 spalls (Table 12; Nern and Cleland 1974), and Richardson yielded no gunparts (Table 13, Greenman 1958). If guns were an important part of Huron technology, and assuming that the ideological subsystem was intact, it could be expected that guns would be placed with the dead, for the journey to the Land of the Souls. This appears to be the case with some of the other subsistence-related items, such as stone and iron projectile points, and iron knives (Tables 9, 11-13).

The hunting and fishing technology at St. Ignace does not reflect changes from the Ontario period, but rather alternatives or adaptations. These adaptations include: (1) adaptations of new European items, i.e., fish hook, (2) adaptation of a more efficient procurement method, i.e., harpoons, probably based on a subtly different environmental context (Great Lakes vs. inland lakes and river exploitation), and (3) adaptation of European materials to fit Huron needs.

All of these decisions reflect individual decision to accommodate the system based on new circumstances, but apparently within the proscribed set of goals and norms. Decisions to adapt procurement tools or techniques can be considered as a change in technology, but in this case, it does not dictate a system disintegration, because it occurs within acceptable bounds (simplistically, having more deer or duck for dinner doesn't make the Huron any less Huron).

Table 11: Lasanen Site Artifact Assemblage<sup>1</sup>

| <u>Artifact</u>      | <u>Quantity</u> | <u>Percentage</u> |
|----------------------|-----------------|-------------------|
| PIPES (0.2%)         |                 |                   |
| Kaolin               | 3               | 60.0              |
| Pewter               | 1               | 20.0              |
| Catlinite            | 1               | 20.0              |
| STONE (1.0%)         |                 |                   |
| Flakes               | 3               | 2.0               |
| Gunflints            | 8               | 4.0               |
| Knives               | 5               | 3.0               |
| Points               | 13              | 7.0               |
| Scrapers             | 4               | 2.0               |
| Groundstone          | 2               | 1.0               |
| Misc.                | 2               | 1.0               |
| Catlinite            | 152             | 80.0              |
| SHELL (65.0%)        |                 |                   |
| Gorget/Runtees       | 15              | 0.1               |
| Beads                | 27              | 0.02              |
| Effigies             | 3               | 0.02              |
| Wampum               | 14,251          | 99.50             |
| BONE (1.0%)          |                 |                   |
| Harpoon              | 1               | 0.6               |
| Points               | 4               | 2.4               |
| Misc.                | 8               | 4.6               |
| Rosary beads         | 158             | 92.4              |
| COPPER/PEWTER (0.5%) |                 |                   |
| Buttons              | 45              | 42.0              |
| Hawk bells           | 8               | 7.0               |
| Tinkling cones       | 21              | 19.0              |
| Points               | 3               | 3.0               |
| Rings                | 21              | 19.0              |
| Medallions           | 3               | 3.0               |
| Misc.                | 7               | 6.0               |
| GLASS (33.0%)        |                 |                   |
| Beads                | 7213            | 100.0             |
| IRON (0.2%)          |                 |                   |
| Knives               | 24              | 53.0              |
| Awls                 | 4               | 9.0               |
| Harpoon              | 1               | 2.0               |
| Point                | 1               | 2.0               |
| Rings                | 7               | 16.0              |
| Misc.                | 8               | 18.0              |

<sup>1</sup> From Cleland (1971).

Table 12: Richardson Cemetery Site Artifact List<sup>1</sup>

| <u>Artifact</u>    | <u>Quantity</u> | <u>Percentage</u> |
|--------------------|-----------------|-------------------|
| PIPES (1.0%)       |                 |                   |
| Stone eagle effigy | 1               | 100.0             |
| SHELL (1.0%)       |                 |                   |
| Runtee             | 1               | 50.0              |
| Effigy pendant     | 1               | 50.0              |
| COPPER (27.0%)     |                 |                   |
| Bangles            | 22              | 59.5              |
| Hawk bells         | 3               | 8.1               |
| Coils              | 3               | 8.1               |
| Mail               | 9               | 24.3              |
| GLASS (71.0%)      |                 |                   |
| Beads              | 99              | 100.0             |
| MISCELLANEOUS      |                 |                   |
| Dog burials        | -               | -                 |

<sup>1</sup> From Greenman (1958).

Table 13: Gros Cap Site Assemblage<sup>1</sup>

| Artifact               | Quantity | Percentage |
|------------------------|----------|------------|
| <b>CERAMICS (1.0%)</b> |          |            |
| Vessels                | 8        | 100.0      |
| <b>PIPES (1.0%)</b>    |          |            |
| Catlinite              | 1        | 10.0       |
| Stone                  | 3        | 30.0       |
| Clay (Iroquoian)       | 4        | 40.0       |
| Stems                  | 2        | 20.0       |
| <b>STONE (5.0%)</b>    |          |            |
| Projectile points      | 39       | 74.0       |
| Misc.                  | 3        | 6.0        |
| Catlinite effigies     | 4        | 8.0        |
| Catlinite scrap        | 1        | 2.0        |
| Catlinite beads        | 6        | 10.0       |
| <b>SHELL (1.0%)</b>    |          |            |
| Beads                  | 2        | 18.0       |
| Pendant                | 2        | 18.0       |
| Eagle                  | 1        | 9.0        |
| Fish effigy            | 2        | 18.0       |
| Gorget                 | 1        | 9.0        |
| Runtees                | 3        | 27.0       |
| <b>BONE (2.0%)</b>     |          |            |
| Mat needles            | 3        | 11.0       |
| Gorges                 | 2        | 7.0        |
| Antler flakers         | 3        | 11.0       |
| Harpoons               | 6        | 21.0       |
| Effigies               | 3        | 11.0       |
| Spoons                 | 2        | 7.0        |
| European combs         | 2        | 7.0        |
| Bracelets              | 2        | 7.0        |
| Fish scaler            | 1        | 4.0        |
| Misc.                  | 4        | 14.0       |
| <b>COPPER (14.0%)</b>  |          |            |
| Point                  | 1        | 1.0        |
| Disc                   | 1        | 1.0        |
| Bracelet               | 1        | 1.0        |
| Hair pullers           | 5        | 3.0        |
| Rings                  | 10       | 6.0        |
| Hawk bells             | 25       | 16.0       |
| Tinklers               | 111      | 70.0       |
| Kettles lugs           | 2        | 1.0        |
| Misc.                  | 3        | 2.0        |

Table 13 (con't)

## GLASS (73.0%)

|       |     |       |
|-------|-----|-------|
| Beads | 854 | 100.0 |
|-------|-----|-------|

## IRON (4.0%)

|            |    |      |
|------------|----|------|
| Knives     | 10 | 23.0 |
| Axes       | 2  | 5.0  |
| Bracelet   | 1  | 2.0  |
| Awls       | 2  | 5.0  |
| Nails      | 19 | 43.0 |
| Misc.      | 9  | 20.0 |
| Gun barrel | 1  | 2.0  |

<sup>1</sup> From Nern and Cleland (1974).



The evidence for native-made ceramics at the St. Ignace village is at odds with the expected pattern of technological adaptability. No diagnostic Huron or Iroquoian-like ceramics have been collected from any excavations or monitoring, despite the presence of numerous 'generic' sherds. These pots are probably associated with the Huron occupation, but appear to be affiliated with trade<sup>14</sup>. As previously noted, the demise of ceramic making may be attributed to a re-allocation of time expenditure, opting to focus on agricultural endeavors, producing a surplus for trade (economic emphasis). If it is assumed that ceramic vessels could be replaced, access to an alternative item is necessary. A logical choice would be to produce a commodity (corn, furs) for the trade of durable European kettles. La Hontan noted that "kettles of all sizes" were available for trade, but these items are not well represented at the St. Ignace village or local burial grounds.

Floral remains and grinding tools provide the evidence from archaeological deposits at St. Ignace relevant to food and preparation. There appears to be a continued reliance on expending energy for the production of agricultural products, with the diet supplemented by a diversity (Cleland 1987) of wild plants (Egan 1988). The plant products were, in turn, prepared for consumption using traditional methods, such as stone grinding platforms and stones to crush the grain (Table 9). This continuance of agricultural pursuits

indicates that decisions were made to relocate in an area with a climatically conducive growing season. It also suggests that the Huron maintained an adequate store of seeds for planting during their diaspora through the western Great Lakes, or connections to obtain more.

#### B. Decorations and Decisions

Historic documents provided scant evidence concerning decisions and preference related to personal adornment behavior, particularly in the later historic period. Herein lies the value of the archaeological record. Details of decisions related to personal adornment are clearly manifested in archaeological collections, from the precontact through historic period. The alteration of items of personal adornment, whether in quality or quantity, could reflect decisions regarding desires to differentiate status, wealth, or to establish ranks or stratify group members. This relates directly to the system of status/rank created by Mainfort (1985), who values the cost of trade goods in beaver pelts to determine worth and wealth. In particular, Mainfort states that decorative items, such as wampum and medals are, "documented status markers" (1985:562). Miller and Hammel take the opposing stance and caution against "casting Indian cultural processes in European cultural terms" (1986:315). The explanation of natives' desire for nonutilitarian and decorative items should "avoid the all too common tautological device of simply defining such items as 'luxury', 'prestige', and 'status' goods, thus inherently

valuable and desirable" (Miller and Hammel 1986:315).

Analysis of precontact and postcontact period collections of adornment articles indicates that changes occurred as more items became accessible through European trade networks.

Material evidence collected from precontact Huron sites indicates that items of personal adornment were manufactured and utilized, including articles fashioned from bone, stone, and shell. At Nodwell, a varied assemblage of decorative items was collected (Table 2). Pendants and beads made of Atlantic marine shell indicate long distance trade was operational, to obtain such nonutilitarian items. Likewise, the presence of copper beads suggests that there was long distance trade with a group in the Lake Superior area. There is no evidence to indicate whether shell and copper were imported as raw material for on-site manufacture of items. Decorative items of bone were probably made at Nodwell and ochre appears to have been utilized for either decorative or ceremonial purposes.

The location of Nodwell at the southern extent of the Huron/Petun region, and isolated by up to 80 miles from the nearest sister village during this period, has been attributed to economic reasons. The site was advantageously located for trade and this village may have functioned to regulate and direct the flow of goods (shell, copper, chert and probably perishable items as well). Latta (1980) notes a similar function to sites in the Albion Pass region of Ontario. There is a persistence in the presence of

decorative shell, copper, and bone items at Draper (Finlayson 1985), noting that bone beads comprise 41% of the bone assemblage (Table 3). Long distance trade for copper and shell is still apparent.

At the Baumann site (Stopp 1985), preference for bone beads continues, comprising 65% of the worked bone assemblage. The trade network of marine shell is not reflected in the collection; however, one copper bead is present. Throughout the fourteenth and fifteenth centuries, collections of ornamentation items are less than spectacular. It is only speculation, but it can be suggested that the bone, shell, and copper decorations were supplemented by a variety of material which would have long since decayed in archaeological contexts. These might have included porcupine quills, minerals processed into paint, or feathers. The presence of the latter item is supported by the faunal collection of these sites which includes species more likely to have been exploited for decorative purposes rather than subsistence (i.e., red-headed woodpecker or finch). Lumps of ochre are also noted at most of these sites.

In spite of fairly extensive excavations at the Robin Hood site, few ornamental artifacts were collected. This may be attributed to one or more of the following: (1) the Robin Hood Huron did not adorn themselves, (2) the occupants of this special purpose site, as an agricultural hamlet, did not need to adorn themselves because they were located at

the site to work, and/or (3) years of plowing and collecting has skewed the collection. The most likely explanation is a combination of the latter two. In support of ornamentation items being present at the site, one bone bead was noted, as well as a variety of plant remains which could have been used for making dyes.

There is a gap in the archaeological record, in that there are no Huron sites which reflect the indirect (protohistoric) European trade period. One site which has a deposition date of between 1620 and 1640 is the Osseonane ossuary (Kidd 1953). As indicated in Table 7, the assemblage shows a considerable range of European and traditional items, with none occurring in great quantities. One of the modern day myths surrounding ossuary sites is that they will contain a spectacular and bountiful collection of materials. This is definitely not the case at Osseonane and it cannot be attributed to looting. By this point in the contact period, scholars are claiming that the Huron are dependent on trade goods, as well as being Christianized: they were acculturated. The traditional ossuary-style burial and relative paucity of European goods does not support acculturation, but rather suggests adaptation and accommodation of foreign materials into the existing material culture/technological subsystem. Meanings and goals are not drastically altered, yet the system has suffered some mild perturbations.

At Ossonane, the collection of decorative items includes a combination of traditionally-made shell beads (1979/75%), European glass beads (467/24%), copper beads<sup>15</sup> (18/1%), and slate or catlinite beads (no number given). According to Kidd, the most commonly occurring glass bead type was red, thought to have been made to purposively mimic the dull red color of catlinite and slate. Red ochre was placed on white shell beads, dying them red. Many of the beads were located in clusters or in rows, indicating that they were strung together when originally placed in the burials. The total number of beads of all materials would not comprise very many necklaces, even if each only had 100 beads. Thus, necklaces were not placed for all the deceased, nor even for all of the deceased females.

If there was either a dependency on trade goods or a significant flow of goods into Huronia, it could be expected that the items would occur in ossuaries in much larger numbers. Preference for European beads is not even demonstrable, although decisions to chose or require red glass beads can certainly be associated with cultural norms (i.e., the color red equals power, cf. Hamell 1983). Nevertheless, to measure the degree of 'acculturation' or change based on ratios of native to trade goods is not considered a valid technique, because it does not allow for individual preferences, accommodation, or adaptive strategies. More glass beads in the ossuary would not mean that the Huron were any less culturally Huron, or more

culturally European. It would indicate a replacement of an analogous item, with the old meaning transferred in some form to the new object: adaptive strategies in a nutshell.

A variety of other decorative items were located at the Osseonane ossuary, reflecting the transitional nature of the material culture assemblage, but not necessarily indicative of systemic change. European brass finger rings were undoubtedly a new item for the Huron. Iron and brass were fashioned into bracelets, similar in function to bone bracelets found at precontact sites. Two grave inclusions worthy of note are clothing and pigments. Numerous sections of beaver pelts (robes?) were observed, supporting the historic record notations that these items were placed as grave linings. The offering of pigments, in particular red ochre, occurred throughout the precontact era in the Great Lakes region. Although the significance of red ochre placed in burial contexts is not completely understood, it is undoubtedly important for ideological and social reasons.

The material culture record is a reflection of problems, choices, solutions, and decisions. With the fur trade, new opportunities, and hence new problems, arose. One anticipated problem has been that of acquiring new items, to the detriment of the old material, causing system deterioration. Investigation of cultural goals and norms in a decision-making context suggests, however that acquisition of the new was based on choices of adaptation, adjusting the system, not destroying it. The items at Auger which are

attributable to decoration demonstrate that new materials were incorporated into the existing system (Table 8). This conclusion is drawn from the fact that European items did not replace native materials wholesale or immediately, but they are found together, with a gradual addition of the new through time. Over 65% of the decorative items are of native materials and techniques. This may be the result of preference and/or accessibility of new items. The material culture assemblage at Auger does not indicate technological change or deterioration with the introduction of trade goods. The material culture assemblage at Auger indicates that when options for acquiring goods occurred, the Huron chose to adopt certain items, in particular iron knives and European decorative objects. There is also evidence that the Huron recycled utilitarian items, i.e., kettles, to serve a new and often nonutilitarian function, analogous to traditional items (i.e., beads). This underscores the adaptability of the system, where the new is realigned to recreate the old or original.

The 1671-1705 Huron village collection from St. Ignace implies that there was a fluorescence in native-made decorative materials. This may have occurred with the availability of iron tools, allowing for more intricate carving work, or it may have occurred because of a reallocation of time. For instance, the amount of time spent by the Huron in trade-related activities at St. Ignace was significantly less than in Ontario. As corn producers,



the Huron were still acting the role of middlemen, whereby other groups would congregate at St. Ignace, trading furs with the Huron for food, who would in turn trade the furs to the French for trade goods. This procedure is clearly delineated in the historic record (Blair 1911 (1):282), where the Huron 'sold' canoes, sheets of bark, fish and food "for procuring their ornaments, which consist of vermillion and glass and porcelain beads".

Review of specific ornament categories from St. Ignace demonstrates both continuity and change. Bone and shell beads are well represented, yet glass beads are far more numerous. The plethora of glass necklace and seed beads in the archaeological record suggests these items were perceived of as relatively disposable and replaceable if lost. Carved bone decorative items are far more numerous than at Ontario Huron sites. The catlinite industry flourished during this period, probably due to both preference and availability of raw material. The presence of several bird species has been suggested as representative of collection and use of feathers for decorative purposes (Smith 1988).

The overall ornament collection reflects decisions to both manufacture traditional items and acquire new. The local contemporaneous burial sites reveal a similar mix of traditional and European goods (Tables 11-13). Often, traditionally made and shaped objects have been refashioned from European items or raw materials, underscoring the

adaptability of the system. The availability of new items, particularly since St. Ignace was the regional fur trade center at the end of the seventeenth century, provided the opportunity for such decisions. The analagous capability of many European items, as replacements for native items, provided the rationale for such decisions. Dislocations in the subsystem would have been minimized by adding new items as correlates, in function, form, and any accompanying belief or value.

### C. Smoking Pipes: Decisions to Change Form and Function

The fired clay pipe complex of the Huron provides the opportunity to look at changes and continuity upon the occasion of two disparate cultures coming into contact with one another. Precontact period Huron sites have yielded numerous examples of clay pipes spanning a wide variety of decorative motifs. A review of the entire pipe assemblage indicates that decisions were made to alter pipes in form through time, but probably not in function or meaning.

Pipes would have been used for two types of smoking activities: (1) ceremonies, and (2) recreation. Historic documents reveal little about the Huron and their smoking paraphanelia, except to say they were never without their pipes and the pipes were sometimes decorated with images of men, animals, and birds, "not for idolatry, but to enjoy looking at them" (Wrong 1939:98).

Fired clay pipes occur on precontact and contact period Huron sites (Wright 1966). The pipe, as a complex,

undergoes changes throughout the precontact era in form and frequency. During the Middle Ontario Iroquois period (Middleport), pipes occur in greater number and variety. Wright (1966:63) concludes that this was not an in-situ development, but an adoption of pipes from the New York Iroquois groups. Support for this lies in the spontaneous arrival of pipes, homogeneity, and the lack of transitional objects. The Nodwell site has an extensive pipe collection (Table 2), with stem shapes consistently elbowed and bowls commonly decorated with horizontal incised lines and a row of punctates.

The pipe complex changes significantly from the Nodwell era to the time when Draper was occupied. In summarizing the Late Ontario Iroquois period, Wright wrote that the elongated ring, apple bowl ring, Iroquois ring, and plain trumpet pipes are dominate types in the early portion of the sequence. These are gradually reduced in frequency by the appearance of the coronet, mortice, and effigy pipes late in the period (Wright 1966:71). The horizontal lined pipes persist as well. Although not discussed in detail, over 3000 pipe fragments were found at Draper (Finlayson 1985), supporting the notion that there was an increase in frequency of manufacture, use and discard during this period. At the Baumann site, the pipe complex is minimal but representative of period types (Stopp 1985), including trumpet and barrel forms. The Robin Hood collection is also

sparse, but representative, partially explained by the fact that neither of the sites experienced extensive excavations.

With the contact between Europeans and native groups, it could be anticipated that the pipe complex would be adapted to accommodate European goods. This does not appear to have occurred however. Persistence of traditional Late Ontario Iroquois period pipe styles can be documented through the turn of the eighteenth century. Bowl types at Osseonane, Auger, Robataille, St. Louis, and St. Ignace show similarities to precontact types. Likewise, marked similarities are also noticeable between Huron and Petun pipes (Garraad 1977). Specimens from the Gros Cap Cemetery site are characteristic of the Late Ontario Iroquois period pipes (Nern and Cleland 1974:51; Wright 1966). Castellated bowls from St. Ignace and one from Gros Cap are similar to castellated coronet pipes from the precontact era (Wright 1966). A miniature clay trumpet pipe from St. Ignace is nearly identical to one found at Auger, both reminiscent of the Late Ontario Iroquois period trumpet pipes.

There are three schools of thought about human and animal images depicted on Huron clay pipes, which are found to occur on pipes from A.D. 1100 through A.D. 1700: (1) they represent false-face images (Wintemberg 1936; Ritchie 1965, (2) they are related to clan affiliations, or (3) the pipes belonged to shamans and represent duality (Mathews 1976, 1981). Evidence seems to lean towards the latter conclusion, although it is not a testable hypothesis.

Multiple and single image pipes occur infrequently on precontact and contact period sites, suggesting they were not owned by clan members. In addition, many of the images on pipes are not in keeping with known clan totems. The false-face society of the Iroquois is thought to have been a historic phenomenon. Although European clay pipes with human effigies could have been available through trade (Faulkner and Faulkner 1987), none have been located on Huron sites. No white clay European pipes, decorated or undecorated, have been found on the Huron contact period sites discussed in text.

If the suggested shamanistic function for human effigy pipes is assumed to be correct, then decisions for retention of this item had to have been formulated based on ideological and social goals and norms. Towards that end, it is suggested that the significance in symbolism on these pipes was important and had to be maintained. The historic record has indicated that the role of the medicine man was intact through the mid-eighteenth century, and related material culture should be expected in an archaeological context. Other items possibly related to shaman activities include blowing or sucking tubes and effigies of animals and mythological creatures. Aside from the possible shaman pipes, fairly standard traditional pipe motifs are present up to the eighteenth century. These pipes, although not elaborately decorated, probably served as 'everyday' items. The consistency in decoration from the Late Ontario Iroquois

period to the eighteenth century suggests that conscious decisions were made to maintain the integrity and continuity of the pipe complex.

This facet of Huron technology, in that fabrication of items through firing was retained, is a clear example of the Huron's ability to make choices. The manufacture of fired clay ceramics ceased completely around 1650. However, the culture group's ability to make fired clay objects, or the technological know-how, did not change. The continuous manufacture and use of native made fired clay pipes throughout the contact period suggests that social and ideological goals were intact and that whatever the reason(s) to decorate pipes, it was valid and persistent despite other options. European white clay pipes were probably available to the Huron, since they do occur on other fur trade era sites. The Huron apparently opted to maintain this portion of their technological system, as represented by material culture evidence, based on decisions that European pipes were not appropriate analogs (for whatever reasons).

#### IV. Concluding Comments

Of the subsystems investigated in this study, the greatest detail of Huron behavior has been made available through the technological sphere. This is primarily due to the specific nature of the archaeological record. Whereas historic references to technological decisions, as they are manifested materially, are infrequent, the archaeological

record supplies information applicable not only to technological decisions, but to the other subsystems, as well.

Nevertheless, caution is suggested when relying on quantification of the presence of material items as an indication of the degree of culture change. Whereas the archaeological record provides valuable data for assessing change, such assessment should be undertaken from the viewpoint of the entire system, and what it has emerged from, and what it may emerge into. Assessment of the decision-making processes channelled through the technological subsystem provides the opportunity to evaluate the choices and decisions reflected in the material record as incorporative, adaptive, or accommodative. Choices for rejection, as a problem-solving technique, can be isolated in the archaeological record, through the long-term persistence of particular traditional items, in the face of new options. The issue of increased efficiency need not always underlie every decision, as personal preferences guided by group norms could have undoubtedly weighed heavily in the decision-making process. Certainly, the retention of the technology and material manifestations of native fired clay pipes, despite the availability of European white clay pipes, suggests that this type of decision was feasible.

Historic documents may aid in interpreting peculiarities in the archaeological record or they may provide missing details about perishable items or behaviors. It is doubtful, however, that documents can ever provide details

of technically-oriented behavior available through archaeological investigations. Together, these two data sources provide a critical opportunity to explain contact behavior. In the case of the Huron, it appears that decisions were made to incorporate new items, as well as for the retention of old ones. There is also evidence for the adaptation of new and old, within the subsystem's goals and system's norms. Technological behavior appears to have been able to withstand external influences, with subtle modifications visible in the Huron system long before European contact.



## Endnotes: Chapter 6

<sup>1</sup> Although critical review of Martin's (1975) work reveals several fundamental weaknesses in his argument, his basic premise is well-founded and worth pursuing along the level of Sharp's (1977) research. Martin claims that the influx of kettles allowed the Micmac mobility as they ceased to settle in a semi-sedentary manner around trees, which they had hollowed out for food preparation (a time-consuming and labor intensive activity). The Micmac, locked in a 'vicious cycle of dependency' on kettles, unwittingly let kettles change their economy (as a highly valued trade item), ideology (grave lot inclusions), belief system (kettles had souls, too), and settlement. Rather, the historic record indicates that the Micmac were implementing a series of adaptive strategies relative to the kettle, fitting it into their existing set of norms and beliefs. This is exemplified by the narrative relating the Micmac's belief that kettles which produced a dull thumping sound had died and gone to where "the souls of kettles are accustomed to go" (Martin 1975:115). Martin's contention that the influx of kettles let the Micmac move about more, no longer needing stationary hollowed-out trees for cooking, is simply not supported by the historic documents. The Micmac moved about to exploit seasonally-available resources before Europeans arrived. They would have had portable cooking facilities or returned to favorite locales and stationed facilities seasonally.

<sup>2</sup> With Draper, and in the case with the Nodwell collection, three areas of concern about the overall composition of both assemblages arise. There is a definite lack of agriculturally related tools, in particular hoes. It must be assumed that these implements were fashioned from wood and have not survived in archaeological contexts. The same concern and explanation arises over the absence of fish hooks. Sagard (Wrong 1939) noted that the Huron made hooks of wood. The Huron apparently did not include hooks in their bone working activities. Another anomolous artifact category is the plethora of scrapers on these two precontact period Huron sites. Scrapers were generally used for some hide-working or wood-working purposes. As the Huron were not prolific hunters, as indicated by the faunal record, it can be assumed that they did not prepare vast quantities of hides. Huron scrapers must have functioned primarily for wood-working purposes.

<sup>3</sup> At Baumann, one dwelling and a small portion of one exterior house midden were excavated. At Nodwell, some houses contained very few wood-working tools. Likewise, few lithics were found in the midden. No intra-village comparative artifact information is available from Draper.

It is possible that sampling error may be the cause of the incongruous lithic assemblage at Baumann.

4 No small plant remain information is available from Baumann, apparently due to the lack of collected and/or processed flotation samples.

5 Johnson (1980:86) asserts, and I agree, that "traditional models for development during the late Prehistoric and Protohistoric Periods of the Ontario Iroquois have been, while valid in a general sense, less than adequate and not too reflective of cultural reality ... [emphasis mine]"  
What is needed is a model

... based on the hypothesis that settlements were not and did not act as, homogeneous units. There will be many subunits, perhaps operative at clan, lineage, or some type of corporate or economic group level ... village expansion and/or contraction indicates that villages did not act cohesively at times; and join a village during its life span [Johnson 1980:86].

This, of course, suggests that ceramic typologies may not be sensitive enough to chart this fluidity, but the fluidity can account for motif patterning. Finlayson (1990, personal communication) can chart the boundary maintenance of protoHuron and protoNeutral (Middleport) groups located in villages only a few miles apart based on ceramic traits.

6 At the Robin Hood site, 4 houses were located, and there was no village palisade. The entire village encompassed 2.5 acres, and 20% of the site was excavated.

7 At the Ball site, 9 houses, one midden and no palisade were located on the site, thought to encompass 10-12 acres. No percentage of village excavated was offered.

8 The Auger site was originally plowed and collected by the landowner. Controlled excavations of 1% of site revealed a village and 4 houses (Latta 1983, 1985).

9 Several seasons of excavations at Le Caron resulted in the excavation of 20% of the 4 acre village site, including 5 longhouses, palisade lines, and external house feature configurations (Johnston and Jackson 1980).

10 This statement is based on review of the Rock Island report (Mason 1986) and the portion of the Rock Island collection which has been attributed to the Huron. From historic accounts, the Huron are known to have been in the Green Bay area between 1651 and 1653. This author is not satisfied

with the conclusions affiliating the Rock Island stratum with this Huron occupation.

11 Controlled excavations by Michigan State University at the St. Ignace Huron village initially isolated intact cultural deposits in an area 600 ft by 300 ft, bounded on the north by an extinct stream bed, east by Lake Huron, and south and west through the location of no cultural material in test units (Branstner 1987). Subsequent to this work, cultural resource monitoring of the installation of a waste water system revealed intact deposits further to the south than previously known to have existed. This work (Branstner 1989) provided an 800 ft north-south profile of the site, increasing the village size to 5 to 5.5 acres. Controlled excavations have been undertaken on 5% of the village, excluding the monitoring work.

12 Table 9 data is derived from the late seventeenth century features excavated during the 1983 through 1986 seasons, with the exception of diagnostic seventeenth century materials from disturbed proveniences (i.e., Jesuit rings from the plowzone).

13 Evidence of rebuilding and repairing of longhouses is manifested by multiple postmolds vaguely positioned in parallel rows, instead of the neat double row per wall configuration found on Ontario Huron sites. Storage pit features do not overlap, and are not crossed by house wall lines, suggesting that houses were rebuilt or repaired on the original location.

14 Diagnostic ceramic types identified at the St. Ignace village include 3 Danner-like rims (cf. Brown 1961; Brown 1975), similar to the vessel at the Gros Cap Cemetery (Nern and Cleland 1974:46). Other rim types from the Huron village (and Gros Cap) show a generic resemblance to the precontact Straits pottery types, particularly the Juntunen Phase of the Late Woodland period (McPherron 1966; Fitting 1980:183-208; Nern and Cleland 1974:42-47). No precontact Native American features were located at the Huron village, with the Middle Woodland MacGregor site located to the northwest by several hundred feet, suggesting that the presence of the precontact-like ceramics may not be attributable to a prior occupation. No fired-clay ceramics were collected from the Lasanen or Richardson burial localities (Cleland 1971; Greenan 1958). At best, 18 vessels are represented at St. Ignace.

15 No mention is made whether the beads are made out of native or European copper.

## CHAPTER 7: Social Considerations: Data and Decisions

### I. Introductory Comments

Although historical documents provide relevant information for the discussion of change and continuity of the sociological subsystem, in a culture contact context, the decision-making processes underlying social behavior are often elusive. Through the explication and examination of social subsystem components, decisions emerge regarding primary culturally binding components, such as reciprocity and egalitarianism. These two parts of the social structure can be viewed as organizing elements of the group's goals and norms, manifested in social behavior such as marriage and residence rules, clan composition, leader roles, feasts, dreams, and story-telling, or information flow.

With contact between the Huron and Europeans, it can be anticipated that decisions would be considered which alter goals and norms, in an effort to participate in a European system. Thus, individualization of decisions for self gain would occur, deviating from individual decisions for the group welfare and security. A demise of social components would be reflected in decisions to alter matrilineal rules, as men gained individual and disparate power through material wealth acquisition from the fur trade.

Egalitarianism and reciprocity, as the foundation blocks of the social system, would cease to operate as group goals and norms due to decisions made to acquire wealth and status on an unequal basis. With the disintegration of egalitarian and reciprocal principles to provide guidelines for group conduct, concurrent alteration in behavioral manifestations would be expected to result. Socially binding institutions, such as myth telling, dream fulfillment, feasts, and dances, would have to be adapted to reflect the alteration of norms and goal objectives.

The following discussion will address the issue of decision-making processes in several social subsystem components, within the context of incorporating new, and adjusting old, norms and goals. In particular, decisions will be considered which modify or reject the underlying social objectives of egalitarianism and reciprocity as intrinsic societal goals and norms. This will be undertaken through the decisions effecting change or continuity of Huron dances, feasts, story-telling, marriage and kin rules, dream events, clan arrangements, and moral objectives.

The social subsystem, with institutions inherently operating to bind together the members of the culture group, affects, and is affected by, the adaptation, alteration, and restructuring of the remainder of the culture system. None of the subsystem decisions operate in a vacuum, and all articulate and influence one another. Thus, a modification in reciprocal values and rules would have a concomitant

reaction throughout the ideological and technological components, manifested perhaps in a change in acquisition of assets or mortuary behavior such as individualization of grave formation to insure ownership of goods.

## II. Decisions of Reciprocity

Upon the first sustained interaction between Europeans and the Huron, the reciprocal nature of the Huron's cultural behavior was noted (Wrong 1939:82, 88-89). From ethnographic analyses, we know that the concept of reciprocity serves several critical purposes in the configuration and operation of a complex egalitarian culture group. Through reciprocal gift-giving, whether balanced, negative, or general, a series of underlying repayment expectations or obligations is established (Mauss 1967; Harris 1975:282-290). This occurs particularly along sanctioned kin lines and functions to create security. Besides obligating behavior for the future, reciprocity binds and unifies the group members and reinforces group identity. Individual choices to not participate in the reciprocal network result in individual ostracism because of the series of safety and security measures built up within, and for, the group participants. The system necessitates that each group member play his/her respective part.

Sagard observed that the Huron shared meat, a scarce commodity, with one another, by giving feasts after a successful hunt (Wrong 1939:82). Le Jeune commented that the individual gains of fishing, hunting, and trading were

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divided between group members through feasts, with non-group members accorded similar treatment (JR 8:127-129). The principles of gift-giving and reciprocity were interwoven into myths and taught to children to pass on this vital societal information (JR 10:149-157).

Although considered to be thieves by the Jesuits, the Huron would often 'return' items when they no longer needed them. After 'stealing' Sagard's kettle, it was later returned filled with sagamite. The bilateral nature of Huron gift-giving did not escape Sagard's attention:

As to liberality our savages are praiseworthy in the exercise of that virtue in proportion to their poverty, for when they visit one another they make presents mutually, and in order to show their politeness they do not willing bargain, and are satisfied to take what one honestly and reasonably offers them, despising and blaming the proceedings of our merchants, who will bargain for an hour to cheapen a beaver's skin [Wrong 1939:140].

These acts of reciprocity insured that at some future opportunity there would be repayment of meat, the priest's kettle would be available again, and neighboring groups were bound into the system for future events. This behavior set up a network of security in the event of future shortage or needs.

Reciprocal behavior on the part of the Huron is related in the 1679 Jesuit recording of a Christian ceremony. This celebration of the Epiphany, which could have been construed by the Huron as a feast for another of their spirits (in this case the infant Jesus), had the participation of "all hurons, Christians and non-Christians, [who] divided



themselves into three companies, according to their different nations that constitute their village" (JR 61:115). Proceeding to make offerings to a statue of the infant Jesus, the ceremony consisted of a series of reciprocal gift-giving events, between the Huron and from the Huron to Christian deities and neighboring Native American groups (JR 61:115-121). According to this account, preference for Christianity had little to do with this festival, which incorporated dances, feasts, traditional dress, and gift-giving. The participation of the Huron was apparently regulated by decisions to undertake these traditional behaviors, and allowed for the incorporation of Christian elements into the native structure. Offerings to the infant Jesus statue were not dissimilar to offerings to sky or moon spirits, underwater panthers, or leaving tobacco at sacred rocks.

Individual decisions to support group reciprocity are evidenced through cooperative donations to the village 'stock' or store of goods, that could later be used to ransom captives, pay trade fares, or be redistributed throughout the group. Regulated by a committee, the stockpile was accumulated through individual donations from war booty or personal acquisition (Wrong 1939:266-267). In 1721, Charlevoix notes that the Huron were able to provide provisions for their own group, as well as supply extra for their neighbors (Shea 1962 (2):12), and he describes the 'public treasury' (Shea 1962 (2):24). Sociologically, this

suggests that individuals could and did choose to apportion items on a reciprocal basis for the group's welfare. This conduct would have been guided by societal norms which were invoked to provide a secure resource base in times of need. Individual decisions to 'bank' goods at a group level insured supplies for group, and hence, individual security.

When those occasions arose where debts needed to be paid, in particular for the restitution of criminal acts, goods were given to the avenged group (JR 5:19-21). Thus, the criminal was not punished, but the crime was punished, and on the behalf of the criminal's group. To collect these goods, a group leader would tell the members what their share should be, and even though "no individual is obliged to make their contribution, they vie with one another, according as they are more or less rich, in sharing these public burdens, in order to show their devotion to the common weal" (JR 38:281-283). This would be undertaken based on the knowledge that 'what goes 'round, comes 'round'. Individuals could: (1) count on fellow group members to offer support should they find themselves in a similar situation, and (2) this social behavior also served as a social regulator for peer pressure to moderate criminal behavior since individuals would not want to have to give away goods to other groups for criminal fines.

The economic and ideological functions of the Feast of the Dead have been outlined. The Feast also served a socially reciprocal function. Thus, by giving goods to

deceased friends and relatives, and thereby provisioning them for their journey to the Land of the Souls, individuals would gain insurance that they would receive equal treatment. By giving, one could guarantee commitments and responsibility on the part of others to give in return for the future. As this obligation need not be fulfilled until a later time, security for the future was established, resulting in delayed reciprocity. Thus, group members were bound together socially, as well as economically, through this indebtedness and anticipated repayment. The historic record indicates that the general institution of the Feast was operating at least until the early eighteenth century, suggesting that the reciprocal function was still a viable component.

A lengthy discourse between the Huron 'philosopher' Adario and the French explorer La Hontan in the 1680s reveals the fundamental precepts of Huron reciprocal beliefs and actions. Recalling that the format of this dialogue casts Adario as the noble, pure thinking 'savage' and La Hontan as the 'devil's advocate' from his French perspective, the topic of Huron reciprocity embodies an assault on the French social and moral system (Thwaites 1905 (2):585-588). To Adario (as a reflection of Huron beliefs), the Huron system, founded on reciprocity and egalitarianism, was superior to that of the French because the Huron had the means to take care of members in times of need. If resources were scarce, they were scarce throughout the

group, and decisions to equally distribute materials insured group survival. Hence, the system of equality needed to remain intact for individuals to be concerned with reciprocal relationships. Noting that the Huron shared corn, fish, and trade goods with fellow group members, Adario chastised the French who would "Sue their nearest Relations for an Ox or a Horse" (Thwaites 1905:586). La Hontan took Adario's attitude to be a reflection of his ignorance and obstinacy, when in reality Adario (or again, Huron values) saw that the Huron social system maintained equality and an expected minimum level of security amongst his group.

### III. Changing Patterns of Trade and Impact on Reciprocity

Individual decisions to participate in an intensified trade scheme appear to have been made based on the principles of solidifying group level peace relations with the French and neighboring indigenous groups, socially binding these groups together and allowing for the access to new and beneficial material items. The relationship of the Huron and the French in the seventeenth century was developed along traditional social rules of fictive-kinship, and the exchange of gifts and group members. The French became 'brothers' to the Huron, a term used to indicate close affiliation and alliance. These trading Huron<sup>1</sup> did not in turn sell or barter these items to fellow group members, but exchanged goods along social lines based on kinship, reciprocal obligations, and gift-giving<sup>2</sup>. The

conclusion to be drawn from this is that participation in trade did not result in individual motives for wealth acquisition, but actually served to unify and reinforce group membership. Individuals benefited by accruing prestige by giving items away, which was an important act for maintaining leader roles.

Accounts of the adaptation of precontact trade networks between the Huron and neighboring groups, upon the arrival of Europeans, are found in the historic record (Biggar 1929:49-53, 131; Wrong 1939:102-103). At the outset of direct Franco-Huron contact in the early 1600s, an alliance/peace pact was made, closely binding these two disparate cultural groups for nearly 150 years. Historic documents indicate two characteristics of trade which are important for the understanding of the socio-economic system. First, at various levels of social organization, whether individual, family, village or nation, there was a concept of 'owning' the rights to a trade network (JR 9:275; JR 10:225). This 'property' could be borrowed, rented, sold, or given away to related group members or to groups within the peace alliance, such as the French or Nipissing. Secondly, the Huron had a system of distributing goods or services, based on social equality and reciprocity, which organized the flow of goods in and out of the villages (or culture system). Descriptions of the procedure of trade indicate that only a small portion of the men actually participated in trade activities by travelling to Montreal,

suggesting a reliance on the methods of distribution to disperse goods to remaining group members.

During the winter months, a portion of the Huron men would leave the villages to trap fur-bearing mammals for later trading. Spring through fall was spent procuring food for storage to get through the lean winter months. The agricultural economy of the Huron allowed men to pursue fur-trapping, whereas many northern Algonkian groups could not be away from food-procurement activities for extended periods. Huron women would prepare the hides for the men to transport to Montreal or Three Rivers in the spring.

During the first three decades of the seventeenth century, a variety of Native American groups went for short periods to trade at the major trading posts at Montreal and Three Rivers<sup>3</sup>. A detailed yearly account of the nature and magnitude of the 1600-1650 trade is presented by Heidenreich (1971:219-280). His research indicates that trade trips to Montreal did not occur annually and when these journeys were made, only a small percentage of the men participated (about 2% or less in any given year). For example, in 1626 the annual take of beaver was 15,000 skins. The average canoe could carry 200 pounds of pelts (averaging 1-2 pounds per pelt: JR 4:255; JR 28:235); thus, 75 to 100 canoes could transport this cargo to Montreal. Considering that other culture groups participated in acquiring this quantity of pelts, the Huron's participation probably amounted to 40 or

50 canoe loads or 150 to 200 men. Heidenreich concludes that the importance of Huron trade

... must be seen in terms of the goods that were brought to Huronia and the social and utilitarian value of these goods, rather than as an activity that employed the efforts of a major segment of the population [Heidenreich 1971:251].

Individuals who chose to participate in trade did so because it provided access to goods, which they could then dispense according to obligations or to create obligations. This gift-giving could have provided individual prestige through the generosity and security offered to fellow group members, and established reciprocal obligations that could be 'banked' for the future.

A hiatus in the French fur trade occurred between 1629 and 1632 due to English incursions into New France. The English tried to utilize existing native trade networks for access to pelts during this period, but met with resistance from the Huron. With the reopening of the French trade in 1632, the Huron resumed their role as middlemen, but trade was sporadic for the next 18 years due to threats of warfare by the Iroquois, revenge raids, superstition, and epidemics. During the eight year period of 1642 to 1649, successful trade ventures were only carried out during three seasons. The sporadic nature of the Huron trade journeys to Montreal reveals a context of decision-making that goes against much current thought regarding Huron socio-economics. Clearly, when problems arose concerning risks involved with trade expeditions, decisions were made to alleviate the

problem(s). When threats of Iroquois raids were apparent, trade, and therefore acquisition of trade goods, was considered secondary to security. Alternatively, although the Huron suspected the Jesuits of casting disease-causing spells, they were not killed due to fear that harming the Jesuits would harm the French alliance and trade relationship (JR 13:215).

This behavior indicates the strength of the Huron-French social bond, when the importance of witchcraft and sorcery in the Huron society are considered. One of the most frequent causes of illness, according to the Huron, was the casting of evil spells by sorcerers (JR 33:199).

'Preventive medicine', through dances, sacrifices, and counter-spells, are noted. Curing dances and feasts were implemented once the spell had been cast, but all too often without positive results. Witchcraft was considered to be powerful and threatened security. Nevertheless, during the epidemic period the Huron chose to maintain their bond with their French 'brothers', despite the threats to their entire society by the Jesuit 'witches'. Risks, security, and material needs were weighed and decisions processed accordingly, with the importance of French-Huron social relations for trade a more valuable consideration than the power of the Jesuit 'witches'. Perhaps the Huron were capable of incorporating this new kind of sorcerer into their system as an option to handle this tenuous situation.



There are a few references to the continued role of the Huron in the trade network during the period of 1650-1670 (JR 41:79; JR 46:69; JR 54:167). The dearth of recordings of this activity is probably due in part to the sparse French presence in the western Great Lakes. Nevertheless, the Tionontate Huron are credited with bringing some of the first loads of trade goods into the western Great Lakes during the 1650s. At Missilimackinac twenty years later, the Tionontate Huron, though few in number, were certainly an integral part of the economic-political scene, and had maintained their social 'kin' bond with their French 'brothers' throughout this period. As of 1685, canoe loads of pelts and Huron were still traveling to Montreal in order to "make a better market than they can do in their own country of Missilimackinac" (Thwaites 1905:92). Trade procedures noted 50 years earlier by Le Jeune (JR 5:265-267) are still being performed in the 1680s, with social institutions intact such as special opening ceremonies, speeches, and gift-giving before the commencement of trade (Thwaites 1905:92-94). This behavior is indicative of reciprocal exchange, rather than the alteration of the social-economic system to mercantilism.

Part of the continuing role that the Huron played post-1650, particularly at Missilimackinac, involved a series of peace negotiations with the Iroquois, generally unsanctioned by the French. Tangential to these attempts at a Huron-Iroquois alliance was the desire to establish a social, and

thus economic, relationship with the English. The Jesuit Father Carheil tried to inform the governor of New France of the growing dissatisfaction of the Huron with the French, to no avail (JR 64:23-29). What began in the 1680s as a series of 'crafty, politic' maneuvers by the Huron to ally with the English resulted in subterfuge and the attempted coup against the French by 1747. Huron motivations for this behavior were based primarily on a growing dissatisfaction with their relationship with the French, who they felt were not behaving like good 'brothers'.

Review of the historic record from 1670 to 1760 indicates that the French in North America made several inappropriate decisions regarding their relationship with the Huron, which would eventually prove to lead to Huron dissension and French capitulation at the hands of the British in 1760. One example of erring French ways was in their vague policies regarding the meaning of Native American alliances which were so important sociologically to the Huron. As 'brothers', the Huron wanted, and therefore expected, the military protection of the French as part of their alliance, but soon realized that the French had a difficult time even protecting themselves (JR 64:31-33). The French also made secret alliances with the Iroquois, resulting in a sense of betrayal by the Huron. Thus, by 1690, what was found to displease the Huron was

... that the alliance of the Frenchmen, besides being useless to them through powerlessness, is also injurious to them, both for commerce and for war ... in Commerce, because it takes away from them, against their will, the trade of the english ... in order to keep them bound to Onnontio [governor of New France] ... This is contrary to all the laws of protection, which consists in maintaining in the liberty of their trade those whom one protects; for otherwise, it is no longer a protection, but a veritable usurpation [JR 64:35].

The general displeasure felt by the Huron regarding the French from the 1680s throughout the 1700s manifested itself in a series of peace negotiations between the Huron, Seneca, and English (JR 64:23-39; JR 65:189-253). During the early part of this period, the Huron were commonly split into two groups: the group led by 'Quarante Sous' or 'The Baron' seeking alliance with the Iroquois and English, and the other group, led by 'The Rat', sabotaging the other group's plans (WHC 16:166-167). Economic considerations, and the problematic relationship with the Ottawa and Cadillac at St. Ignace and Detroit, instigated these political maneuvers.

The Huron, having resettled at Detroit by 1702, sought an English alliance. This was undertaken, in part, to enlist English assistance in retaliation against the Ottawa, who the Huron felt had betrayed their alliance over the years (MPHC 33:118-121). The threat of the English-Huron alliance was also used as a hold against the French, to strike a better trade bargain. After returning from a trading trip to Albany, the Huron told Tonty that "if he did not cause the goods to be given them cheap, they could not prevent their young men from going to the English for them,

who offer them to them at a low price" (MPHC 1903:158). Callieres insightfully notes that the situation was such that he "greatly fear[s] that these intrigues may have disastrous consequences to the Colony" (MPHC 1903:158).

As early as 1708, Cadillac notes that his plan to bring all of the Native American groups from around the Great Lakes to Detroit to set up new villages was a mistake (MPHC 1903:431). The Huron were causing the most problems, allying with the Miami to trade with the Iroquois and English. D'Aigremont notes in 1708 that all of the Huron would have ceded with the Iroquois, if they had been allowed to retain their name and have a separate village (WHC 16:256-259; MPHC 1903:446-448). It should be recalled that the Huron had close relatives within the Seneca nation, or the Tahontaenrat who resettled in mass in 1650 as adoptees (Trigger 1987:791-792, 834-835). Old social ties were still strong and not easily broken. Historic accounts refer to the Tahontaenrat as 'Iroquoized-Huron' and the on-off alliances between the Seneca and Huron were undoubtedly based on the presence of these close kin. D'Aigremont also notes that moving the center of trade to Detroit had a deleterious effect on access to native groups of the upper Great Lakes, who were now trading with the English. The behavior of the Huron and their sequence of seemingly mercenary alliances with opposing nations, should not be viewed as unscrupulous behavior. Rather, the flexible and

expandable Huron social system allowed for the inclusion of any group, if some mutual benefit was to be accrued.

When the French changed trade procedures to a centralized trade in 1726-1727, Huron chiefs petitioned on "behalf of our whole village" for the reinstatement of free trade and the recall of Tonty, who they felt was not acting with their best interests in mind (MPHC 34:49-50). The French alliance with the Huron was considered to be valuable, but more importantly, the French were concerned that if the Huron did not get their requests, they would side with the Fox and go to war against the French (MPHC 1904:51-52). Tonty was thus dismissed from his duties as commander at Detroit, and the free trade reinstated, in an effort to please the Huron. In 1730, Noyan noted that the Huron must be placated first and foremost, because all of the other Native American groups looked to them for leadership (MPHC 1904:76-77). Noyan felt that the key to maintaining the valuable Huron alliance was through "fear and affection: by forming a post there which will impress them with awe; and by selling to them at a cheap rate" (MPHC 1904:77)<sup>4</sup>.

By 1739, the Huron had embroiled relations with other Native American groups to the point where they did not feel secure at the Detroit post. Again, there was the feeling that the French, particularly at Detroit, would not or could not offer them protection from Ottawa attacks. The Huron are generally noted as travelling back and forth between

Detroit and the Sanduskey Bay area from this point on, as they were strengthening their ties with the Iroquois and English, yet surreptitiously maintaining their relations with the French by maintaining a village near Detroit.

By 1740, the Huron are again split into two decision-making factions<sup>5</sup>: one faction wanting to leave Detroit for either Montreal or a permanent village in Sanduskey, and the other choosing to remain at either Grand or Bois Blanc Island (MPHC 1904:201). The Huron captains at this time, following centuries-old ceremony for maintaining prestige, couched their requests for removal to Montreal by stating that they could take care of themselves, but that they desired protection for their women and children. The Huron waited a year for Governor-General Beauharnois to send them a response of a wampum belt, asking them to move. The Huron again felt neglected and betrayed by the French silence. Beauharnois' request for them to move came in June of 1741, but by this time, the Huron had changed their minds and would not move.

By the 1730s through 1760s, the European-Native American social alliances appear to have been oriented more towards political motivations, rather than economic contexts related to the fur trade. The French expansion into Ohio was undertaken to ward off English encroachment in the 1740s-1750s. At this time, alliances with Native American groups were necessary to aid in the defense of this borderland, not for trading purposes (Eccles 1983).

Alliances were strengthened through gift-giving and trade, but also by informing the Native American groups that the French did not want to occupy these lands, but keep the English settlers out, thus benefiting the French and Native Americans. When the Native American groups south of the Great Lakes signed a peace treaty with the English in 1758, old allies with the French quickly defected. The French relinquished control of the Ohio Valley in 1758 and by 1759 Quebec and Niagara fell to the British. By the spring of 1760, the French had surrendered to the British army of Amherst at Montreal, effectively ending French control in the Great Lakes and Canada. One faction of the Huron, ever careful opportunists, allied themselves with the British during this period, whom they saw to be the victors of war. The other faction moved to Canada, remaining allied with a few French settlers.

The Huron and French were bound as 'brothers' through fictive kin terms as early as 1609, when they enlisted Champlain's aid in attacking the Iroquois (Biggar 1929). Thus, reciprocal relations between the two groups were expected, and are reflected in historical accounts throughout the seventeenth and early eighteenth centuries (JR 5:249-267). This social unification from the outset was to underlie Huron attitudes and behavior towards the French for over 150 years.

Unfortunately for the Huron, the French system did not operate along the same mutually obligatory guidelines, and

their often opportunistic behavior left the Huron feeling that the social ties were betrayed (JR 65:207-253). The Huron questioned the behavior of the French concerning reciprocity, group unity, and their sense of equity. For instance, the Huron, who divided scarce resources amongst their group, could not understand why the Frenchmen did not apportion their goods amongst French street beggars (Wrong 1939:89). Nor could the Huron trust the French and move to Detroit upon discovering the French-Iroquois alliance which Cadillac was negotiating in 1702 (JR 65:251-253), or the neglectful treatment by Beauharnois, perceived by the Huron in the 1730s-1740s (MPHC 1904).

#### IV. Decisions and Dreams

The role dream events played in the Huron culture system can be discussed in a social or an ideological context. Dreams are inextricably linked to social behavior, particularly through their interpretation and social obligations for fulfillment of details on an individual and group level. This leads directly to ideological manifestations of dreams and links the two subsystems and the flow of information through dreams. Dreams not only provided each Huron with a guiding Oki, but were the conduit for social unification. The belief invested in the power of dreams on the part of individual Huron allowed for group solidarity, in that dreams were thought to be a window to perceive future events and could forecast wars, hunting



success, health, and sickness (JR 9:111; JR 10:153-157, 169-177; JR 23:171).

As these were all occurrences which could have significance at the group level, the dreams of an individual would mandate group level support, whether through the enactment of behavior proscribed in the dream or fulfilling dream requests for material contributions. Dreams, therefore, could conceivably infiltrate and regulate any action in any sphere of the Huron culture system. The concept of dreams is as critical to the composition of Huron-ness as rules of animism, souls, egalitarianism, or reciprocity. This is because dreams provided a channel for individual behavior to reproduce and reinforce group goals and norms.

An historical overview of dream occurrences underscores the pervasive nature of this phenomenon in the Huron culture system. The historic record illustrates the defensive maneuvers undertaken by the Jesuits for 150 years to eradicate this behavior, which they saw as the blockade against conversion, since "their superstitions are infinite; their feasts, their medicines, their fishing, their hunting, their wars, - ... almost their whole life turns upon this pivot; dreams, above all, have here great credit" (JR 8:121).

Most religious systems worldwide are founded on the fundamental principle of a system of belief ('blind faith'). The Huron belief in the power of dreams is what made the

system 'work'. Therefore, when a person dreamed of receiving gifts or having a feast thrown in his/her honor, group members obliged without hesitation:

They are so willing to relieve that they do not fail to find it, although it may be something of value or importance to them, for they prefer to suffer and be in want of anything rather than fail a sick person at need [Wrong 1939:118].

Dreaming played an integral part in curing ceremonies and performance of medicine men. To the Huron, the soul expressed itself to the body through dreams. If the dreams were fulfilled, the soul would be content. If the dreams were not carried out, they would dream of the proper course of action to remedy the situation (JR 39:19). The sick person would dream of items or feasts necessary for recovery and the villagers would immediately attempt to fulfill these desires (JR 10:173-177, 185-187, 201-209; JR 13:31, 263; JR 39:21). Even if the ill person died, it was not the fault of the dream or fulfillment, but blamed on some unforeseen demon spirit. The desired material goods were often redistributed within the group or offered as sacrifices to Oki, both practices being of some latent benefit to everyone.

While at St. Ignace, Marquette commented on several occasions about the Huron trying to satisfy desires brought about by dreams; in particular, feasts and dances to cure the ill (JR 57:251-263). Despite nearly 60 years of Christian influence, some Huron still believed in the power of dreams "as The savages have vivid imaginations, they are

often cured of Their sickness When They are granted what they desire" (JR 57:259). Nonetheless, Marquette indicates in the same narrative that other Huron no longer had recourse to follow dreams, which once would have told them how to go about hunting, fishing, and trading. The decisions to abandon dreams is inadvertently discussed by Marquette, who indicates it was because he showed them the power of Christian prayers, where God now had the opportunity to aid "in a special manner The Hurons who went to Hunt; for he Led them to places where they killed a great number of bears, Stags, Beavers, and Wildcats" (JR 57:261).

Once again, individuals choosing to 'convert' and assume the duties of Christianity, such as prayers, found themselves associated with deities invested with more power than their indigenous ones. Marquette's account of the Huron in 1672-1673 indicates that the Huron could be identified as either Christian or non-Christian, but it is difficult to determine if they were symbolizing this dichotomy in an open fashion. They lived in a single village, comprised their councils as unified decision-making bodies, and undertook subsistence and warfare activities together. The ramifications of choosing to convert must be viewed as individual decisions, based on accumulated knowledge, processed to satisfy needs and desires, but still within the culturally-defined bounds of accepted behavior of group norms and goals. Were the Christian Huron to have created new goals or drastically altered old ones beyond the

scope of acceptable non-Christian Huron expectations, the Christian Huron would have had to factionalize during their St. Ignace residency because the groups' goals would have been too disparate.

Nearly 50 years after Marquette told of the Huron's persistence in dreaming for visions, Charlevoix notes similar behavior at Detroit. Dreams instigated village-wide game parties, in an effort to cure an ill person (Shea 1962 (1):14-16). The elaborate details of one dream-induced festival to cure a sick woman indicate that group members were still willing to "acquit themselves exactly of what should be prescribed them and to maintain the ancient customs" (Shea 1962 (2):349-350). The missionaries tried to stop this 'folly' but the entire village was involved with carrying out the assigned duties. The woman dreamed of needing many things, including a blue blanket owned by the priests, who refused to partake in this event. Charlevoix relates that the Ononharoia or 'turning the brain upside down' part of the ceremony was still in vogue nearly 100 years after Le Jeune mentioned it (JR 10:175; Shea 1962 (2):350-352). The sick person or his/her representatives would go to each household and the occupants were to guess what items were desired by the dreamer, giving away articles until the correct item was deduced. The missionary tried to make an issue out of the fact that he had not contributed the required blue blanket, showing the hoax of the ceremony, but he was told that the sick woman's *genii* had reappeared

"and assured her that the refusal should do her no prejudice, because the French not being natives of the country, the genii had no power over them" (Shea 1962 (2):352).

After 150 years of contact, there appears to have been a simultaneous change and continuity between individual attitudes towards dreams and visions. Some Huron apparently opted for substituting dreams, as the visionary quests for advice and guidance, for Christian prayers. Prayers were used to request advice and guidance in the same activities as dreams once had been: hunting, fishing, warfare, trading. Prayers could be reinforced through ceremonies and offerings to Christian deities (Jesus, God, saints). This behavior is not dissimilar to tobacco offerings to the Huron rock or sky gods, and individual decisions to alter traditional behavior appears to have been made within the context of power. Events and actions of the French, in particular the missionaries, supplied the Huron with information which they could interpret and process to mean that Christian god(s) and shaman (missionaries) were more powerful. Oddly enough, the Christian/non-Christian division appears to be one in belief systems alone and did not manifest itself into two Huron factions, as documented through the following discussion of the Huron clan system. This suggests that the flexible nature of the Huron system allowed for individuals to make decisions and live by those choices, as long as they

fell within the general bounds of societal norms and goals, so that deviant behavior was not an issue to contend with.

#### IV. The Huron Clan System Through Time

This portion of the study will not directly entertain the contexts of decision-making processes, but rather will briefly address the structure and integrity of the decision-making body. This consideration is integral to the problem because the accommodation of the structural mechanism can have direct influence on the ensuing operation of said system.

The purpose of clans in complex egalitarian culture groups is an oft-debated topic (Powell 1881; Harris 1975:338-349). Likewise, the change in function and structure of clans through time has relegated much discussion, including topics such as the evolution of matriclans, descent and kin reckoning, and marriage and residence rules. In anthropological terms, the clan system of the Huron appears to have provided identity to individuals for a variety of political and social functions. The clan divisions cut across the boundaries of 'nations' and villages and united the Huron. Clan exogamy for marital rules also served to bind the group as a whole. Inter-clan marriages set up a series of networks throughout the many villages of the Huron and created relationships across the landscape for reciprocity, trade, warfare alliances, or even factionalization.

Historic evidence reveals that the 'Huron'<sup>6</sup> were comprised of four groups<sup>7</sup>: Bear, Rock, Cord, and Deer. The Bear and Cord groups are referred to as 'brother' and 'sister' and the other groups are cousins, due to their relatively recent arrival into the Huron system (Tooker 1964; JR 16:229). In nearly every instance, the Huron are referred to throughout the 1615-1750 period as being comprised of three main 'nations' (Wrong 1939:91; JR 10:233; JR 15:39; JR 43:191; JR 61:115; WHC 17:238; Shea (1):9, 22; MPHC 1904:183). Within this tripartite division, there are at least 8 clans (JR 33:243, 247; JR 38:283; Potier 1743; Finley 1840; Clarke 1970; Powell 1881; Connelly 1899; Barbeau 1915, 1917; Tooker 1970; Steckley 1982).

A cursory glance at the available information listing clan<sup>8</sup> divisions of the Huron indicates continuity and simultaneous flexibility in the system. The creation or addition of new clans could occur through adoption or division of existing groups (JR 16:227). The adoption of nearly 600 fugitive Wenro in 1638 is evidence of the fluidity of the Huron clan system (JR 8:116; JR 16:252; JR 17:212; JR 18:234; JR 21:230; JR 39:138). The Wenro were apparently merged into the existing Turtle clan, as evidenced by the translation of the word stem of their clan name, with the whole phrase reading "When they were small they adopted the Wenro as their grandchildren" (Steckley 1982:80-81, 1985:17-19). The 1640 entry for the Turtle clan (Andia8ich) is repeated again in the 1743 Potier census, but

as one of the three major clan or phratry divisions. Other consistencies between 1640 and 1743 include the presence of Bear, Deer, Wolf, Sturgeon, and Hawk clan divisions.

One of the persistent ethnohistoric topics of inquiry is the quest for the identity of the refugee group which fled Huronia in 1650, to resettle in St. Ignace in 1671 and later move to Detroit in 1701 (Tooker 1978:398-406; Clifton 1983). Clifton's (1983) assessment and conclusions of the 'ethnogenesis' of the Wyandot can be challenged based on an alternative interpretation of the same documents. In sum, Clifton argues that the Deer and Wolf groups in Potier's 1743 census are remnant Tionontate, and the Turtle are Huron who re-emerge through boisterous political maneuvers with their original appellation, Wyandot. The supposed Deer/Wolf Petun split from the Turtle and identify themselves as Huron. This occurs in spite of the fact that Clifton insists that the Petun-cum-Huron are more traditional and have a greater sense of identity. One wonders why they didn't re-emerge as the Tionontate, particularly since, according to historic documents, this name was kept alive throughout the seventeenth and eighteenth centuries.

In counter to Clifton's argument about the eighteenth century identity of the Detroit Huron, the 1640 French-Huron-Onondaga dictionary (Steckley 1982) indicates that the Huron also had deer and wolf group (clan) divisions. Nevertheless, Clifton asserts that it was the Turtle who split as a unit and were eventually removed to Oklahoma, who



were the 'true' Huron or Wyandot. The Turtle were comprised of four subgroups or clans, according to Potier's 1743 census. Clifton has translated two of these clans as place names, though the ethnolinguist Steckley concludes that the clan names refer to types of turtles (1982). This conclusion is reflected in the nineteenth century clan listings of turtle-affiliated clan names, i.e., mud, striped, prairie, small, etc. (cf. Barbeau 1915a, 1915b, 1917). The nineteenth century studies of the Oklahoma Wyandot also list clans of the Deer, Bear, Hawk, Wolf, and Beaver, as related previously in the 1640 and 1743 lists.

Thus, evidence indicates that the 1747 split of the Huron at Detroit was not along Deer/Wolf and Turtle clan lines, but rather, each faction included a mix of all clans. This decision would have been paramount to the retention of rules of clan exogamy marriage and residence. If the Turtle had moved in isolation of the other Detroit clans, their cousins and brothers, they would have virtually destroyed their system for social interaction. Clifton's argument is further weakened by Pachot's 1719 information that the Deer clan was brother to the Wolf and Turtle, with the latter two related as cousins (Kinietz 1965:62). Any schisms would most likely occur between the Wolf and Turtle, with the Deer clan not affiliating with either brother since this would have put clan members against related members.

Campeau (1987), in a critique of Clifton's essay, concludes that the Deer/Wolf do indeed represent pure Petun,

but the Turtle are not Huron. He concludes that the Turtle clans most likely represent Ottawa who merged with the Tionontate at St. Esprit, and later at St. Ignace. Campeau has erroneously mixed the concepts of Huron 'nations' (Bear, Deer, Rock, Cord) with clans. The 1640 list does not list clans by nation, simply because the purpose of clans was to cross cut 'national' or village boundaries. Thus, any given nation could be comprised of any or all of the eight 1640 clans. This compositional structure appears to have persisted through the eighteenth century. Campeau's assertion that the 1747 Turtle could not be Huron, because the Turtle did not have any of the constituent parts of the seventeenth century Huron, i.e, Bear, Cord, Rock, or Deer, is thus in error because he expects the clan (Turtle) to include nations. It should be the other way around, with the nations including multiple clans. Likewise, Campeau's suggestion that the Turtle could be adopted Ottawa is tenuous, particularly in lieu of the clear documentation of the ill feelings and suspicious behavior between the Huron and Ottawa from the 1680s through the 1740s (Thwaites 1905; MPHC 1904). There are no historical documents which enumerate that the Huron are comprised of Tionontate and Ottawa.

Potier's census of the Huron at Bois Blanc Island in the Detroit river in 1743 indicates that the Huron were still in the area and he lists the individual chiefs who had wanted to go to Montreal, Sanduskey, or Grand Island (Potier

1920; Gould 1929). There is some form of factionalization noted in the census, by the presence of a 'big' and a 'small' village at Bois Blanc, and two sets of villages at 'the fields'<sup>9</sup> (Sanduskey [Potier 1920]). The Huron are recorded as being divided into three 'bands' or nations, with 10 subbands or clans, all with a primary chief, subgroup captains, and members of 'council'.

The tripartite division of the Huron has been noted throughout the historic period (Wrong 1939:91; JR 10:233; JR 15:39; JR 61:115; WHC 17:238; Shea 1962 (2):9, 22; MPHC 1904:183; Steckley 1982). The 1743 population estimate at Detroit shows a multiclan organization, undoubtedly comprised by a mix of cultural groups by this time<sup>10</sup>. For instance, several of the Detroit households note the presence of the 'testes-plattes' (Flat-heads or Chickasaw), and an Iroquois woman is listed as the head of another house. The organization would have served similar socio-cultural purposes as in the seventeenth century and early eighteenth century: clan exogamy, marriage rules, residence rules, and so on. Members of each clan lived in both of the Detroit villages, which were actually adjacent to one another. This would not be expected if there was a resurgence of separate cultural identities and volatile factionalization. Splitting of the Detroit Huron must have occurred along pro-English or French lines, or for religious beliefs. However, the Christian and non-Christian Huron, although differentiated as separate groups in documents, are

living throughout the villages and interacting for a variety of social, political, and economic reasons.

The three main clan chiefs resided in the small village on Bois Blanc, with one having a secondary residence at the small village at 'the fields.' Five other clan chiefs and two 'council' members also resided in the small Bois Blanc village. In the large Bois Blanc village, four clan chiefs, one council member, and a medicine man resided. All of the Deer band chiefs are in the small Bois Blanc village. This residence pattern lends support to the conclusion that factionalization was not along Deer/Wolf versus Turtle clan lines.

If there were a separate Huron group and a Petun group which fled westward in 1650, these two groups would have been merged after 100 years of travelling together and cross-group marriages. It is therefore suggested that the identity of either the 'true' or 'pure' Petuns or Wyandots would certainly have been blurred by 1747. Likewise, the same three major clans or phratries listed in the 1743 Potier Detroit census are first listed in a mid-1650s French-Huron dictionary (Steckley 1982:29-30). Rather, the 1740s factionalization of the Huron did not occur along clan lines, but through particular decisions of leaders and the following of interested group members. Although Clifton states that Angirot and Orontondi were partners in the 1747 infractions against the French, these two Turtle clan chiefs were actually at odds with each other, noting that Orontondi

wanted to move to Sanduskey or Montreal, and Angirot choosing to stay near Detroit (MPHC 1904: 199-202).

The recording of decision-making processes from this period primarily consists of intra-group schisms and plans to move from Detroit, in part for social alliances and economic considerations. The chief of one of the Turtle bands, Orontondi, has been credited with European leadership qualities and market-oriented economic motives (Clifton 1983; Skinner 1989). The documents do not provide evidence for Orontondi's single-handed, dictator-like capabilities (cf. Campeau 1987). Throughout the 1730s and 1740s, he made eloquent speeches to the French requesting removal to Montreal and he awaited a wampum belt-style reply. If Orontondi possessed such hegemonic leadership qualities over his fellow Huron, one would expect that he would have directed them to move to Montreal, not requested the move. Clifton singles Orontondi out as a would-be conspirator against the French because he had one arm and was a cripple, thus "marginal to the centres of traditional power and exhibiting personal stress that went beyond the social structural strains already dividing the population" (1983:14). It is believed here that the physical deformities or injuries of Orontondi were not necessarily handicaps, but could have even been associated with honor, respect, and bravery. The characteristics attributed to Orontondi are out of line with the contemporary discussions

of a leader's position and abilities, and with the accounts of Orontondi's traditional behavior.

It is suggested here that the Tionontate Huron, as they are referred to in historic records, were in fact comprised of nations and clans of the Tionontate and Huron of the contact era, whether by blood or belief. Flexible adoption practices would allow for these two closely related groups to merge, and a larger pool of clans, for marriage exogamy, would be available. If the Tionontate and Huron did not merge, they did not practice inter-clan marriage and the two groups would have retained very distinct identities. This does not appear to be the case.

In conclusion, relevant historical entries suggest that there was continuation of the basic Huron clan structure, in composition and function, through the historic period. This social mechanism also demonstrates its flexibility and fluidity through time with the adoption of groups into the existing system. The Wenro inclusion into the Turtle in 1638, or the inclusion of completely new groups, such as the Snipe clan (Seneca) in the nineteenth century (Barbeau 1917), demonstrates this behavior. The issue of specific identity, manifested through the penchant of some historians for particularistic detail, should not override the issues of systemic integrity, change, accommodation, or continuity. Decisions to retain the clan structure and function through history were processed through the context of the integrity of the social system. No new order could have superceded

the clan's role in organizing descent and kin ties, marriage and residence rules, and social bonding.

#### VI. The Matri-focus of the Huron and Decisions

Historic documents cannot be assumed to be accurate and inherent biases of the writer and interpreter should be explored. Nonetheless, historic recordings of Native American lifeways by Europeans upon contact often provide the only information about social and cultural details. Such traits might not be discernible through archaeological investigations, or they could be dramatically altered through time. Thorough scholarly research will not assume that the historic record is necessarily an accurate reflection of past behavior, but will attempt to assess the strengths and weaknesses of the material. One Huron component which has been afforded much scholarly debate is that of the matrilineal/matrilocal (matri-focus) features of social organization. These fundamental arguments have been levied which have consequences for the discussion of decision-making processes in a social context.

One line of reasoning concludes that the Huron did not have matrilocal residence rules at contact. This feature is thought to have arisen during the seventeenth century with the social instability created by the influence of Europeans (Richards 1967). Richards (1967) states that the Huron may have been matrilocal in theory, but it is not what was practiced in reality. Trigger (1978:56-57) critiques Richards' use of historic accounts and suggests that

misunderstanding of the documents and the fundamental principles of a matrilineage has led Richards seriously awry. An alternative view is that the Huron had been socially organized through matrilocal/lineal rules for several hundred years prior to contact. Archaeological evidence has been used to support this position; in particular, the regularization and increase in size of longhouse structures and villages (Dodd 1984; Warrick 1984). These factors are thought to be concomitant with the strengthening of matrilineal/localism, possibly resulting from an increase in sedentism and reliance on agriculture, and thus, the importance of the women's role in food procurement. The third position regarding Huron matri-focus is that it deteriorated through time due to an increase in the men's role in the fur trade (Smith 1970).

The discussion of whether the Huron matri-focus arose or deteriorated as a contact historic phenomenon is significant because the decision-making processes in this context are revealing about the effects of contact. If matrilocality is an historic phenomenon, what were the problems and goals which arose that initiated these decisions to change? If matrifocality strengthened or weakened through time, the goals and benefits to be derived should be explored. Examination of the available historic evidence and critical review of related position statements based on archaeological evidence indicate that matrifocal rules of marriage descent and residence were the norm in



Huron society at contact and through the historic period.

As is the case with any societal norm, deviations are allowable within the proscribed and acceptable limits.

#### A. Historical Evidence

Documents from the seventeenth and eighteenth centuries reveal details of matri-related behavior and rules of the Huron. Several observations were made that inheritance of property or leader roles occurred through the mother's lineage (Wrong 1939:130; Biggar 1936:317; JR 6:225; JR 20:215). The matrilineal nature of the Huron system is discussed at length (Biggar 1936:317; Thwaites 1905:461-462; Wrong 1939:121-122; Kinitz 1965:409; Shea 1962 (1):25-28). These narratives state explicitly that the Huron took the name of their mother for all societal affairs. Potier's 1743 census lists women as heads of one half of the households at Detroit. Most of the remaining household heads are listed as clan leaders (Gould 1929; Potier 1920). Accordingly, some vestige of matrilineality is present at the eighteenth century Detroit villages. Persistence into the nineteenth century of matrilineality is documented by Powell (1881:59-60). His research states that "The gens is an organized body of consanguineal kindred in the female line. 'The woman carries the gens' ... expresses the idea that descent is in the female line" (Powell 1881:59). In turn, the decision-making power invested in Huron women suggests that matrilocality would be requisite to keep this

body of knowledge and power intact (JR 26:297; JR 14:17, 53; JR 17:162; JR 23:127; JR 9:238; JR 12:41).

A more arduous task is that of assessing marriage rules of residency from the available historic documents. Historical evidence relates almost as many cases of non-matrilineal residence behavior as they do cases of matrilocality. A 1639 reference indicates that a woman was born in one village, but had moved to another upon marriage (JR 17:165). This is at odds with the principles of matrilocality, where the man should move into the village of his wife. The instance of a wife moving out of the house after a domestic dispute is also incongruent with matrilocality rules, since the husband should be the one to relocate (JR 23:227). The marriage of non-Huron women into the Huron system is also noted (JR 13:199; JR 27:25), but this can be explained under the flexible and adoptive nature of the Huron system. Several household censuses also depict family compositions incongruent with the expectations of a matrilocality pattern (JR 21:287; JR 13:215-223). During this same period (1615-1650), and often from the same observers, details of Huron residency were recorded which clearly indicate that matrilocality rules were implemented (JR 13:11, 13; JR 8:137, 141; JR 13:133-139). Mercier recorded the last days of a dying man in 1637 and clearly indicates that the sick man was living with his in-laws (JR 13:245-247). There is little post-1650 through 1800 documentation

available concerning residence rules, but Trigger (1978:57-58) discusses nineteenth century cases of matrilocality.

#### B. Archaeological Evidence for Matrilocality

Evidence on archaeological sites has been used to assess the concept of matrilineality/matrilocality of the precontact and contact Huron. The changing pattern of village layouts and fluctuation of longhouse length, through time, provides the data for this argument. Archaeological investigations at Ontario Iroquois period sites indicate that there was a gradual increase in longhouse length circa A.D. 1250-1400, with the internal house features becoming arranged in a more orderly fashion (Warrick 1984:73; Dodd 1984; Kapches 1990). House arrangement within the village area also became more formally organized. The prime impetus for this alteration towards orderliness is thought to have been the increased importance of agriculturally-produced products in the subsistence regime. Reliance on crops for sustenance required an increase in sedentism, and with the women's role as primary food producers, rules of matrilinealism and matrilocality are thought to have become more formal and structured.

Towards the end of the fifteenth century, house length gradually decreases, concomitant with an increase in trade relationships visible in the archaeological record. Warrick (1984:67) concludes that this decrease in house length results from the formation of tribal alliances, causing the dispersal of localized clans. This is the period suggested

by historic documents to have seen the rise of the 'Huron Confederacy' and inclusion of new 'nations'. The intervillage alliances were reinforced through the increased trade, as supported by archaeological evidence<sup>11</sup>.

Hayden (1977, 1978, 1979) asserts a corporate nature to the Late Ontario Iroquois Huron social organization, through the competition for trade routes and material wealth acquisition. The corporate groups would be reflected in longhouse size and associated material goods. Individuals would move between houses in search of material wealth and the corporate groups functioned as "land holding units, redistribution and trading units, [and] holders of rights to religiously important functions" (Hayden 1976:28). Hayden uses dissimilar frequencies of artifacts between houses at the Draper site as his data base, and concludes that each house was ruled by a chief or corporate head who would have provided for his supporters. As the chief was more successful, he could attract more "adherents to his corporate group" (Hayden 1976:8). Hayden uses this to explain longhouse length increases and structural additions. This argument is counter to the fundamental principles of egalitarian societies and matrilineal/matrilocal rules. In fact, Hayden uses examples of chiefdoms in support of his theory of corporateness. Hayden offers no explanation for the decrease in Late Ontario Iroquois period longhouse size, even though this period offers the potential for amassing quantities of goods on an individual level due to the rise

of trading opportunities. Likewise, there is no archaeological evidence for an increase in per capita storage or living areas during the A.D. 1250-1500 period, nor does the early ethnohistoric record indicate that the Huron even had institutions for wealth acquisition. Warrick agrees with the corporate nature of the Huron, but sees the stimulation for the development of longhouse length resulting from a competition over scarce resources (i.e. meat, hides, chert). This would have allowed for the development and continuance of a matrifocal social organization (Warrick 1984:43).

Several scholars see a demise of the Huron social order during the protocontact and early contact periods (Trigger 1987; Dodd 1984; Tyyska and Hurley 1969). Trigger states that the pre-1615 indirect flow of trade goods into Huronia had a profound negative impact on the social system (Trigger 1984:16, 1987:245). The decrease in longhouse size in the historic period is used in support of the contention that the matrifocal organization of the Huron deteriorated due to competition and stress from the fur trade.

During the early historic period (1600-1650), Warrick suggests that contact, vis-a-vis trade, the rise of capitalism, and Christianity "disrupted native economic, social and political systems, causing village disorganization and the virtual disappearance of longhouses" (Warrick 1984:72). Nuclear families would have become more independent as the influx of trade goods (particularly iron

axes) caused a breakdown in matri-family cooperation, such as for agricultural pursuits of land clearing and harvesting (Hayden and Canon 1982). Warrick uses the presence of cabin structures on historic period sites as evidence for this socio-cultural disintegration: smaller structures signify a disintegration in the matrilineal/lineal composition of households. Nevertheless, historic references tell us that the historic period houses were still quite long<sup>12</sup>, housed numerous families related through the mother's side, and cabins were used for special purposes or to house visitors (JR 10:199; JR 11:265 JR 13:227, 237; JR 17:91). The presence of cabins on historic period sites, as guest accommodations, would be expected considering the fluid movements of individuals for trading purposes.

Dodd (1984) demonstrates the integrity of house structures through time, with deviations accountable by differences in matrilineal populations. The size of the structure would be dependent on the family size, with an increase reflected through house additions. This evidence can be used in support of the continuation of Huron matrilinealism. If all the historic period structures were found to be markedly smaller than precontact and protocontact, i.e. cabin-sized, one might assume a concurrent demise of matrifocal rules, with a re-orientation towards patrifocal or unifocal rules. This is apparently not the case. Cabins occur only infrequently on

protohistoric and historic Huron sites,<sup>13</sup> with several historic Huron sites having only longhouses (Kapches 1984).

Archaeological evidence from the 1671-1705 St. Ignace Huron village reveals three to four longhouse structures, at least 80 ft long, placed in orderly rows (Branstner 1987). Tooker (1978:400) shows a plan of the Detroit Huron village in 1732. The village drawing indicates that the houses were traditionally constructed of bark, approximately 60 feet long, with centrally aligned hearths. Each hearth was shared by two opposing families<sup>14</sup>. The 1743 census substantiated this configuration with household populations varying from 20 to 40 people (Potier 1920).

Archaeological evidence of longhouse length indicates that: (1) from A.D. 1300-1450 longhouse length increased, (2) from A.D. 1450-1600 longhouse length decreased, (3) from 1600-1650 longhouse length remains consistent yet with variety in size, (4) the 1671-1705 evidence indicates that longhouse structures were still being constructed, housing multiple families, and (5) the Detroit plan and census indicates longhouse structures up to 60 feet in length were constructed. The seventeenth and eighteenth century structures consistently average at least 60 feet in length.

In conclusion, the archaeological evidence of longhouses does reflect decisions to implement changes in the Huron system through time. Options to alter the subsistence regime circa A.D. 1250-1400 may have resulted in a strengthening of matrilineal/local rules, reflected

through regularized spatial organization of houses and village layout. An increase in trade networks, and thus individual movements between villages, may have resulted in the decrease in house length between A.D. 1450-1600. Notably, this is the same period when cabin structures begin to be constructed. Archaeological sites from the contact period indicate a consistent trend in the regularization of the village arrangement and internal house configurations.

Nevertheless, there is a substantial and significant decrease in longhouse length from the protohistoric through historic periods. This may be the result of one or more factors. The fluid nature of the Huron residence/clan system has been noted. During the protohistoric and historic periods, the Huron incorporated related groups into their system ('confederacy'). This afforded individuals with more options for movement, for social or economic purposes. House size may have decreased because family groups were getting larger and households had to be (and could be) split (JR 14:15-17, 23-25; JR 10:291; JR 13:125; Wrong 1939:92-93). There is conclusive evidence from the archaeological record, supported by historic documents, that the concept of matrilineally organized longhouse persisted through at least the first half of the eighteenth century.

#### VII. Concluding Comments

Several essential variables of the Huron social order have been investigated in the context of decision-making and culture contact. Expectations of altering social goals and



norms were anticipated as unique problems arose with contact. Patterns of reciprocal exchange are recorded throughout the history of the Huron. The egalitarian rules which regulated reciprocal behavior are reflected in narratives of individual equality and the role and power of leaders. Decisions to amass individual material wealth do not occur, nor is disparate household level wealth (i.e. as in family level inequities) demonstrated through the archaeological record. Individual behavior to maintain reciprocity and egalitarianism (whether conscious or not) would have insured a minimal level of individual security. The maintenance of these goals and norms was enacted through dispersal of goods through mechanisms such as feasts, curing ceremonies, and burial offerings. The rise of an elite class and desire to acquire unequal wealth would have stimulated group conflict. Conformity to reciprocal norms is apparent, with creative decisions processed to instigate institutions to equalize goods.

The context of dream events in Huron society demonstrated the persistence in concept and decisions to alter the procedure. Although dream-induced curing ceremonies, dances, and game playing persist through time, accommodation to Christian influences is evident. The decision to incorporate praying into the system was based on acquisition of protective power and security.

The labelling of Christians and non-Christians by French missionaries has been noted, but this dichotomy in

beliefs or behaviors did not manifest itself socially. Factionalizing behavior appears to have occurred along lines of political allegiances and economic considerations, as evidenced by the analysis of clan-related decisions.

Decisions to maintain the basic tenets of matrilinealism through the historic period would have been processed through the context of social organization. At one extreme, the rise of a patrilineal structure would have required severe adjustments in kin reckoning, descent, clan affiliation, village and house configuration, and mythology. Matrilineal groups may have changed in size through time, but information gleaned from Potier's 1743 census suggests a continuity in the principles of the system.

Decisions to maintain a flexible group membership are evident by the notation of nonHuron individuals residing in several Detroit structures, including Chickasaw, Fox or Miami, and Iroquois. Additionally, women are frequently listed as the heads of households, with clan leaders listed secondarily. This suggests a continuity in women-oriented residence and lineage rules. It is apparent that the social system was mutable within proscribed bounds, allowing for changes in outward appearance of institutions, but not in function. Individuals who chose not to conform would have had the option to affiliate with another group.

Social behavior is reflected in the changing role of trade logistics, and indicates that: (1) the level of participation in trade increased with European contact,

along existing social networks and rules, (2) the social structure was unaffected by population decimation due to disease and warfare, which in turn did not affect the level of trade participation, (3) the diaspora of the Huron, particularly the Tionontate Huron, did not preclude their participation in the fur trade, (4) from 1670 to 1760 the Tionontate Huron actively participated in the French trade and also sought alliances with the Iroquois and English for access to those goods as well as for security and protection, and (5) trade was conducted throughout this period by both parties with the reciprocal expectations of the Huron system.

Concerning the rationale of trade, the historical documents indicate that throughout this period: (1) not all group members participated in trade, (2) group members who did participate in dispersing goods throughout the system, did so based on social expectations and norms, and (3) evidence for wealth acquisition, and thus differential status, is lacking. Leaders gained prestige by giving goods away, not by hoarding them. There is no evidence in the historical literature that the role of 'leader' changed into a status/rank hierarchical position, and there does not appear to have been a breakdown in the economic contexts of egalitarianism, reciprocity, or social cohesion.

In conclusion, our expectations for decision-making contexts revolve around adaptation to the criteria of a market economy orientation. Thus, with a shift from an

egalitarian-reciprocal based indigenous economic process, it is anticipated that individuals made decisions to acquire 'wealth' or disparate levels of material property beyond their immediate consumptive requirements. The decisions for procurement of unbalanced property by an individual would be based on the knowledge that this would lead to new status roles, a change in leader qualifications, and a hierarchical ordering of group members based on dissimilar property holdings. Thus, unequal assets would result in intragroup competition, the creation of elite and impoverished sectors, and the disintegration of egalitarianism, reciprocity, and social binding through goods redistribution. New institutions for socially dealing with the new economic hierarchy would have to be formed or evolve, or the society would suffer.

Analysis of available historic documents provides no evidence for the rise of a wealthy class of Huron, nor of the creation of new economic institutions, throughout this period. Several authors view the documentation differently and use archaeological evidence to posit the development of corporate structures and wealth acquisition (Hayden 1977, 1978). It is suggested that these studies do not critically evaluate details of historic references and archaeological assemblages. Historic references indicate that individual decisions were processed through the context of maintaining group norms, particularly through the role of leaders, reciprocal relations, and economic endeavors. With access

to greater amounts of material wealth throughout this period, the Huron embellished existing institutions for the dispersal of goods through the group (Ramsden 1981: Wrong 1939:266-267). Trade behavior continued as an institution for acquiring goods, by a few individuals, for the dissemination along kin-lines or obligations.

It is evident that decisions were made based on economic motives to acquire more goods. This resulted in a series of related political maneuvers to maximize satisfactory economic opportunities, but always in keeping with social considerations for satisfying security through stable alliances (Eccles 1983:359-360). Thus, the Huron leaders appear to have been good decision-makers for the group: they used knowledge of the seventeenth and eighteenth century political situation to play the French and English against one another, to assure access to goods for their group. Reflecting on the importance of social alliances, the Huron made themselves indispensable political players to the French, who would even remove a post commandant rather than lose the Huron alliance. The Huron leaders used their political skills to insure not only social and economic security, but military security for their group as well. The social behavior was refined and attuned according to the changing European political and economic atmosphere of the seventeenth and eighteenth centuries, but the Huron economic

perspective did not change from reciprocal relations to a profit-making market orientation.

## Endnotes: Chapter 7

<sup>1</sup> Recall that individuals 'owned' trade routes (JR 10:225) and relationships, with tolls paid to pass and trespassers summarily punished through fines. The concept of 'owning' is troublesome, however, and this may have been more oriented towards some form of 'stewardship' along economic lines. But this in turn implies a form of 'chiefdomship' for leadership, which did not exist. Perhaps these routes passed through clan or lineage hunting territories and in this sense, the resources (particularly for trading resources) could be 'owned'. This would then be in the same sense of 'ownership' of territories and beaver as amongst the Algonkians.

<sup>2</sup> Ramsden (1981) suggests that a serious problem arose in the first half of the seventeenth century when the Huron were faced with more goods than the means with which to redistribute them. Using historical documents and archaeological site collections (primarily ossuary data) Ramsden concludes that the Huron solved this problem through the elaboration of existing traditional institutions. Goods were redistributed through intensifying the number of grave goods offered during the Feast of the Dead, through gambling, dream fulfillment, and punishment of crimes with penalties of restitution and fines.

<sup>3</sup> This offers further evidence that the French presence during this period was limited to a handful of missionaries and explorers in Huronia.

<sup>4</sup> Noyan also notes the serious conflict of interest of the post commandant's involvement in trade and subsequent ruinous effects on trade networks, price structure, and negotiations. Noyan recommended that "the commandant of this post - if he is to keep good order there and to make his authority respected - ought to debar himself from all trading, whether with the French or with the savages" (MPHC 34:77).

<sup>5</sup> Throughout the historic period, records indicate that the Huron had the capability to faction into two or more separate, yet related groups. For instance, in 1650 at least three disparate factions of Huron emerged: (1) the Tionontate Huron who fled to the western Great Lakes, (2) the 'Christian' Huron who fled to Quebec, and (3) the Huron who were 'adopted' by the Seneca. By the 1680s, the Tionontate Huron at St. Ignace were contemplating a split along pro-English and pro-French allied lines (Thwaites 1905:219-224). By 1695, some of the Tionontate Huron were allying themselves with the Miami at the St. Joseph River (Blair 1911(1):225-257). The Baron, a Huron chief, took a group of Huron in 1667 to settle with the Miami and

negotiate with the Iroquois and English (WHC 16:166-167). Thus, the Huron factionalizations of the 1730s and 1740s is not a new occurrence, as suggested by Clifton (1983) or Skinner (1989), but within the context of decisions relevant to economic considerations and group movement processes, based on a variety of goals, problems, and available solutions.

6 'Huron' is supposedly derived from the French term 'hure', meaning boar or wild pig. This is reportedly in reference to the hair style of the Huron men, who wore their hair cropped close on the sides with a narrow bristled area up the center, reminiscent of the tuft of hair on the head of a boar (JR 16:229). Heidenreich (1978:387) notes that the term might refer to an Old French word for 'ruffian, knave, lout' or an 'unkempt person'.

7 Attignawantan (JR 19:125) = Bear  
 Attigneenongnahac (JR 13:37) = Cord  
 Arendahronon (JR 8:71) = Rock  
 Tohontaenrat (JR 13:55) = Deer

For more discussion of the four nations see JR 16:227; Tooker 1964:9-12 and 1978:404-406 (alternate spellings and references) and Heidenreich 1978:381-388.

8 As to clans, moieties, gens, phratries, and nations, or groups which symbolize membership, it is doubtful you can change clan affiliation due to descent reckoning and the potential for incest.

9 The later configuration is reminiscent of the Late Ontario Iroquois period settlement system where several small cabins (hamlet sites) are found in close proximity to agricultural fields, some distance away from the main village (W. Finlayson, 1989 personal communication).

10 There is no evidence to support Clifton's claim that the Deer and Wolf 'phratries' represent 'pure' Tionontate [Petun], who referred to themselves as Huron and settled in Ontario post-1760. Likewise, there is no evidence for Clifton's claim that the Turtle 'phratry' represented 'pure' Huron, who re-emerged as the Wyandot, allied with the English, and were removed to Oklahoma post-1820s.

11 Dodd (1984:270, Table 6) presents the following information regarding the change in longhouse length through time. These numbers have not been verified and are based on a fairly limited sample of houses and villages. Likewise, the A.D. 1300-1450 data suggests that special function structures (ceremonial?) may have skewed the average length, particularly when considering the standard deviation is 20.0m. Note that the larger the house length mean, the larger the standard deviation. It would be interesting to



rework the averages after throwing out the outlying length measurements. For instance, data from Le Caron A.D. 1630-1650 indicates a pattern aberrant from that listed below. Johnston and Jackson (1980:178) state that the mean house length is 26.2 meters with a range of 21.8 to 29.7 meters, well above the mean listed below.

| Length         | N   | Range      | Mean   | S    |
|----------------|-----|------------|--------|------|
| A.D. 700-1300  | 38  | 5.1-56.4 m | 16.3 m | 10.7 |
| A.D. 1300-1450 | 30  | 5.0-97.9   | 35.5   | 20.0 |
| A.D. 1450-1609 | 124 | 7.5-71.0   | 28.6   | 14.7 |
| A.D. 1610-1650 | 88  | 5.3-51.0   | 19.8   | 9.0  |

12 Dodd (1984, Appendix 1) states that historic references are not accurately reflected by archaeological evidence. The dimensions recorded by Europeans are erroneous to the extent that they appear to refer to the largest structures, and not the average sizes.

13 In the case of the Neutral, they did not face the magnitude of trade effects or contact until the 1640s. Why would their social system have deteriorated contemporaneously with the Huron when they were not undergoing the same contact context?

14 This village plan indicates that the houses were fortified with a 'Vauban'-style palisade, but the reality of this construction is suspect when considering that this shape structure was the traditional symbol used by the French to indicate the concept of a palisaded or stockaded village.

## CHAPTER 8: Recapitulation and Conclusions

### I. Recapitulation: The Problem

This study has focused on developing a model of decision-making to be used for cases where cultures come into contact with one another. The intent of modelling decision-making processes has been to formulate a way in which to investigate, evaluate, and explain the reactions and behaviors of indigenous populations who come under the influence of foreign cultures. The decision-making process allows for the flow of information, through individuals and through the system, from which problems, choices, and solutions can be addressed. Acculturation theory is not considered to be sensitive enough to do this. In addition, acculturation assumes a deleterious eventual outcome, and as a model to evaluate culture contact, change, and continuity, acculturation is a unilinear, often unicausal, and certainly unidirectional, process. Decision-making processes allow for the implementation of adaptive strategies for creativity and accommodation in the face of new problems or situations which arise with contact. Importantly, decision-making allows that the indigenous group had control and the capability to weigh the pros and cons of choices, solutions, and decisions. Acculturation theory implies a passive role

on the part of indigenous groups, with wholesale elimination of the group's cultural integrity.

These objectives concentrate on one division<sup>1</sup> of social organization, referred to as complex egalitarian culture groups. As a concept of social organization, operating assumptions of a complex egalitarian culture group have been explored to define anticipated and expected behavioral boundaries. For instance, it can be assumed that a nonhierarchical group, with norms and goals organized on principles of egalitarianism and reciprocity, will have a decision-making process which differs from a rank/status group. Within a complex egalitarian culture group, individuals have a sense of flexible and fluid group membership and identity, and they are visible and viable players comprising that group. This is important to the model of decision-making processes, which occur in a complex egalitarian culture group within the context of individuals who have no authority or power per se, but are nonetheless respected as leaders because of their decision-making abilities.

## II. Recapitulation: The Method

The methodological tact for this study has been to organize the structure of a culture group as a system, collapsible into parts. This is founded on general systems theory (cf. Boulding 1856; Bertalanffy 1950), but for the purposes of this research is applied as a general system approach. The general systems approach is the mechanism for

organizing both the model and the data. It is not used in this case, as a model, in and of itself, to be tested. It is felt that Brown's (1979) research using general system theory to view culture contact and change established the validity of viewing a culture as a system which has the capability to change through time, stimulated by external and internal feedback. The culture as a system, according to Brown, also has the ability to regulate itself, by adjusting, adapting, adopting, and accommodating its components when faced with new options and choices. Thus, Brown's model is used as the methodology to look closer at the processes of the system's behavior, through a model of decision-making. The partitioning of culture, assumed here to operate as a system, into arbitrary yet controllable components, was undertaken in part as a reaction to acculturation studies. Unicausal explanations for acculturation focuses on a particular aspect of a culture as the impetus for the entire culture's demise: conversion to Christianity is thought to have caused a breakdown in traditional ideology, and thus the entire system; or dependence on trade goods is thought to have altered traditional technology, and thus, the entire system; and so on. By separating the components of a system, potential perturbations in, or even the demise of, a subsystem could be isolated. It has been assumed that no subsystem acts in isolation of the others, however, and a change in one could

incite reactions and responses from the others. These responses could serve as controlling devices, however.

A critical component of the general systems approach is that a system can regulate its change, through feedback and ensuing adjustments. The flow of energy, matter and information through the system is channeled between subsystems through this feedback. The fact that information is storable and can be retrieved and transmitted, allowing for, and regulating adjustments, is crucial to decision-making processes. Information flow is often a neglected component of system studies because it cannot be quantified. Yet, information flow oversees much of energy and matter considerations. It is felt that the role of information can be qualified and its responsibilities delineated through a model of decision-making.

### III. Recapitulation: The Model

This research is based on the necessity of developing a model which will address the adaptive strategies of an indigenous group in a situation of contact. Acculturation theory does not allow for active participation or decision-making by the indigenous group. Therefore, it is felt that modelling decision-making processes of a complex egalitarian culture group is an appropriate explanatory framework in which to focus such discussions. Undertaking the creation of a model appropriate specifically to seventeenth and eighteenth century Native American groups was not attempted because it would be too restrictive. The model has been

devised as an explanatory tool for individual and group level decisions and offers a procedure of decision-making that accounts for the critical role which information plays in the system and its ability to encounter unfamiliar matters. The flow of information and individuals are two key components of the decision-making process.

The model of decision-making advocated in this study outlines a process of spiral or reflective behavior. A problem is encountered, causing options and choices to be generated. This is undertaken within a culture groups' norms and goals, which imply bounds for the decision-making process. Ideas are generated and stored information recalled to proceed with the decision-making process. During this procedure, the relevant ideas about the problem can be subjected to modification based on the recalling of pertinent information. Most likely, a solution will not occur, so return to the problem is necessary and subsequent ideas will be introduced, using the initial idea as a point of progression for anchoring), reflecting upon it and reaffirming what was discovered throughout the process. This procedure networks with the mechanisms of the general systems approach and feedback. The utilization of such a model requires fundamental assumptions to be explicated related to complex egalitarian culture groups' decision-making processes. These include information flow, leaders and influence, norms, goals, deviance, conflict, conformity, and consensus. Assuming that a culture system is an

information system interrelated with energy and matter, then this information is directly related to the culture group's norms and goals. The flow of information between individuals insures that all group members have the same set of norms, and hence, expectations for behavior which is goal-oriented towards some positive individual or group outcome. Importantly, the shared set of norms offer some parameters for decision-making, if it is rational behavior. The norms also afford rules for managing deviant behavior. Leaders within complex egalitarian culture groups do not have authority or regulatory power, but rather lead by charismatic influence and by facilitating the group decision-making process. Individuals who serve as leaders usually comprise a council or committee, which assures that decisions are consensus based. However, the decision-making process, as modelled here, allows for the expression of conflict.

Within this conflict period, the group members have the opportunity to accept, reject, or modify solutions, or even group goals and norms. It allows for individual decisions to be made. Conflict is viewed as a positive part of the decision-making process because it stimulates creativity and negotiations. This mechanism is integral to the decision-making process of complex egalitarian culture groups, because decisions are consensus based, not dictated. Conflict has the potential of causing solutions to be more critically evaluated before decisions are formulated.

Within the precepts of the model of decision-making, certain general expectations of subsystem behavior were delineated. These general expectations were then refined based on the application of a specific complex egalitarian culture group, the Huron, and knowledge about how that group was organized and operated. Towards that end, an examination of the structure of Huron decision-making was undertaken. Evidence leads to the conclusion that the Huron decision-making structure was comprised of leaders and councils who served as facilitators of decisions.

The tenets of reciprocity and egalitarianism underlie ideological behavior. With ideology also operating under the supposition of a balance between man and nature, expectations of decision-making processes must contend with the ramifications of altering the subsystem.

Consideration of decision-making and technology, one prevalent context can be focused upon. The material culture of a group can be a sensitive indicator of options, problems, choices, and decisions. With the culture contact, the material culture context, as expressed in the archaeological record, can reveal details of change and continuity not found in the historic record. Of paramount importance to this topic has been the discussion of whether a change in material culture necessitates a change in technology. It is suggested that material culture can be adapted or adopted without a concomitant demise of the technological subsystem. Utilization of European goods by



the Huron does not appear to have resulted in the Huron having a European technology. Evidence indicates that the Huron adopted and adapted European material culture into the their own set of goals and norms, through the decision-making process of solving problems and insuring security.

The social subsystem served to organize and identify individuals as group members. The set of norms or 'rules of behavior' were guided by the principles of egalitarianism and reciprocity. It should be evident that these two concepts underlie all subsystem components and focusing on related decisions has provided insights into culture change and continuity. Thus, alteration of egalitarianism or reciprocity would stimulate systemic changes in the rules of marriage, kin-reckoning, trade relations, burial acts, and so on. Application of historic documents and archaeological collections attributable to the Huron, to the model of decision-making, with the aforementioned system expectations in mind, has proven to be a valid explanatory tool in cases of culture contact.

#### IV. Recapitulation: Applications of the Model

In Chapters 5 through 7, the relevant historical and archaeological information pertaining to the Huron was applied to the model of decision-making. Specifically, subjects were isolated which offered insights into decision-making processes in a culture contact context. Subjects were organized through the general systems approach, but overlap and feedback between subsystems was inevitable. In

particular, reciprocal relations and egalitarianism were found to underlie all expectations of individual behavior.

Analysis of the technological subsystem leads to the conclusion that the role and nature of precontact trade networks were adapted by the Huron to accommodate the influx of European goods and native demands. Likewise, the Huron made decisions to modify the role corn played in their subsistence regime, expanding production to accommodate economic concerns. Eventually, the change in the corn production level appears to have had a concomitant alteration in material culture, with at least the cessation of the manufacture of fired-clay pots, which were replaceable with metal kettles.

The intensification and expansion of trade networks with contact appears to have been undertaken along traditional rules of reciprocity and egalitarianism. It served to socially unify disparate groups through fictive kin and trade partner lines. Within the Huron group, the dispersal of trade goods along real kin lines also served as a social binder. Evidence, both historic and archaeological, does not indicate that motives for personal wealth acquisition occurred, or if they did, societal norms would have served to regulate this aberrant behavior.

The impact of increased trading on the society has often been considered integral to the demise of the Huron. If the Huron were dependent on trade and goods, with population decimation due to diseases, trade would have been

effected, leading to the downfall of socio-economic subsystems. This research, however, reveals that: (1) trade never disrupted the social structure during the pre-epidemic period, as evidenced by sparse European material culture collections from 1615-1650 Huron ossuaries and village sites, (2) during the post-epidemic period, there were still enough Huron men to carry on trade at the requisite level, as evidenced by the fact that only a small portion of the men ever carried the trade, returning to their village and dispensing goods throughout the group, (3) evidence clearly indicates that the Huron consciously chose to trade if there were benefits to be accrued and security, as evidenced by decisions that trade goods weren't worth the risk of going to Montreal for fear of Iroquois attacks, and (4) the Huron role as 'middlemen' continued post-diaspora through the mid-eighteenth century with corn the primary exchangeable commodity, as evidenced by historic references through the Detroit era and archaeological collections from the St. Ignace village.

Analysis of the ideological subsystem leads to the conclusion that the Huron undertook a series of decisions, implemented to adapt and adopt Catholicism into the native ideology. This was accomplished by the Huron through the creation of analogies or metaphors. For instance, the Huron Land of the Souls was equitable to the Jesuit's Heaven, Oki or demi-gods equal to the Jesuits, Hell equal to the Iroquois torture furs, and so on. These and similar

Christian concepts could be understood and rationalized within Huron norms and beliefs. Nevertheless, the Huron often took Catholic dogma literally, thinking baptismal waters were a charm to ward off diseases, or prayers were offered to God, who would bring good hunting, as did once dreams and vision quests. Historical evidence unequivocally supports the conclusion that the Huron ideological subsystem was capable of making accommodative and adaptive decisions. Myths were created to account for the presence of Jesuits as sorcerers and disease epidemics. In essence, the creation of myths allowed for the creation of history, which in turn legitimized and explained the European presence and behavior.

The Huron sky-deity or Oki could be likened to the Christian sky-deity, God, although the Huron considered the latter to be more powerful. Another incorporative behavior of the Huron was to 'convert' to receive gifts and guns. Guns given as rewards for conversion was even accommodated by the Jesuits into their belief system!

Continuity in the rationale for activating the Feast of the Dead has been documented. As an institution to socially bind individuals together, the function remained stable and changes would have had ramifications for other subsystems, particularly social and economic. If unequal wealth acquisition had occurred, a segregation of grave lots and definitive association with grave goods would be concurrent. Likewise, there would be simultaneous economic mutations, as

the quest for individual wealth resulted in mercantilistic or market-oriented attitudes and behavior. Historic accounts note that the Feast provided the opportunity to dispose of material goods as inclusion for the dead. The placement of larger numbers of grave goods in burial pits (their souls, that is), was both for the recent and long-since dead.

Although conversion to Christianity by the Huron is thought by some scholars to have caused intra-group dissension, leading to the disorganization and downfall at the hands of the Iroquois, this research has derived differing conclusions from the documents: (1) the Huron incorporated Christian elements into their existing ideology, sorting out and choosing between deities and behaviors considered beneficial and power-laden, as evidenced by adoption of the Christian God, baptismal rites to ward off evil spirits, and so on, (2) this incorporation of Christian elements was primarily founded along analogous beliefs or institutions, as evidenced by the God/Oki, biblical creation/Huron creation myths, Heaven/Hell and Land of the Souls/Iroquois fires analogies, (3) continuation of traditional ideological institutions which were altered in form but not function, as evidenced by change and continuity in burial procedures, but not rationale to socially bind individuals, and (4) the categorizing of the Huron into Christian and nonchristian groups by the Jesuits, which had no behavioral reflection, as evidence by infidels and

converts living together, having councils together, and going to battle together.

Two sources of information are available for discussion of technological decision-making processes: (1) historic and, (2) archaeological. Historic references relate to burial goods, subsistence-related goods (and behavior), and personal adornment. Although these topics are dealt with in documents, the archaeological record reveals more details. Nonetheless, neither data source overlaps completely, underscoring the necessity of utilizing both resources, which yield complementary results. In particular, the historic record sheds light on goods and related technology which would have perished in the archaeological record, whereas the archaeological record provides specific details about individual items. Without historic documents, the burial of foods, oils, and clothing would remain unknown. Food preparation behavior and relevant decisions are elaborated on in the historic record, providing details of choices and rationale for decision-making. Despite the position that the material culture record reflects human behavior, only so much information can be gleaned. Historic references tell us that the Huron did not like the way European hand-mills ground corn too fine, and archaeological evidence documents a persistence in native made grinding tools.

With the archaeological evidence, insights into the prehistoric record are also available. This allows for a

greater time depth perspective and assessment of the system's change or continuity before European arrival. Subsistence related decisions indicate that the Huron made general decisions to maintain dietary emphasis on corn and fish, whose presence are verified with archaeological remains. Likewise, settlement were selected with fishing and agriculture in mind. This pattern persisted at St. Ignace and Detroit. The tools to undertake these activities changed, however, with contact and new options available. Analogous European items replaced traditional ones, in particular for fishing, hunting, and decoration. Nevertheless, despite this accommodating behavior to adopt new items, the composition of technology remained relatively stable. The same fundamental conclusions can be derived from the evidence related to fired clay pipes and decorative items.

The available information regarding decision-making and technological concerns in a contact context, leads to the conclusions that whereas the material culture changed through adaptation and adoption, the technology remained relatively stable through time. This conclusion has a serious implication for the investigation and analysis of contact period archaeological sites. Whereas archaeological material culture assemblages can yield details of decisions, reflecting options and choices for particular items, under acculturation theory, a different conclusion about the system's reaction could be generated. That is, the presence





of a greater frequency of European goods, and a lesser frequency of native goods present in an archaeological context could spawn the conclusion that the group was acculturated. With a model of decision-making and adaptive strategies, a greater frequency of European goods and a lesser frequency of native goods can mean that decisions were implemented to maximize security and conserve energy through the incorporation and adaptation of new items, changing the goods used but not the system.

It has been stated that the two main organizing elements of the social subsystem are egalitarianism and reciprocity. These concepts serve to bind together the system within the set of shared norms and beliefs. These latter concepts are the rules for expected behavior and manifest themselves in social institutions such as residence and marriage rules, clan composition, leader roles, and so on. An alteration in the egalitarian structure would trigger fluctuations throughout the system. With contact, change in the social subsystem was an option, particularly if individuals chose to procure material goods at an unequal rate for self gain.

Reciprocal behavior within Huron or any other complex egalitarian culture group, served to set up a series of obligations, for future security or 'insurance'. In addition to obligating future behavior, reciprocity had immediate returns in that it united and bound together group members, and reinforced group identity. Investigation of

the historic record reveals acts of reciprocity throughout the seventeenth and mid-eighteenth centuries. The Jesuits noted this behavior, in particular, because they considered it to be one of the few positive qualities of the Huron. The continuity of reciprocal behavior implies a continuity in the social subsystem, for it appears that the Huron did not become individualistic through their contact with Europeans.

The role of dreaming in Huron society encompassed and guided much of daily events. Dreams directed hunting, ceremonies, sickness, and totems. The criteria specified in dreams to cure the ill stimulated group-wide cooperation and participation. Thus, dreams inspired group unity. With the contact between missionaries and the Huron, a new opportunity arose that was found to be analogous to dream quests. The Christian practice of praying for assistance from the European sky-deity, God, was seen by the Huron to produce positive results. The Huron adoption of praying, to make it rain, or epidemics to cease, was a logical incorporation of a behavior they saw to be beneficial. This in turn, lead to a dichotomy in Huron actions: those who prayed and those who dreamed. Although this may have resulted in the labeling of 'Christians' and 'non-Christians,' the separation of infidels and converts, however, appears to have been in name and not in conduct. This conclusion is evidenced by the persistence of the fundamental details of settlement pattern, village layouts,

household composition, and council structure, through the course of history.

The clan system of the Huron provided an excellent opportunity to investigate decision-making processes which result in continuity and change. As the clan divisions functioned to provide identity and rules for individuals for a variety of social, economic, and political functions, they likewise served to unite the Huron as a group. Historical evidence portrays the clan system as being fluid and flexible, allowing for the incorporation of entire groups, as well as providing guidelines for factionalization. Similarities in clan divisions from the 1640s through the 1740s provides evidence for the continuity in this social institution. The clan's role in organizing marriage and kin ties, residence rules and social binding was maintained through decisions to allow it to be flexible and inclusive, yet maintain the integrity of the social functions at the same time. As support to this, the historical and archaeological evidence relevant to the matrifocal nature of the Huron suggests continuity.

#### V. Concluding Remarks

Historical and archaeological information has been applied to the model of decision-making processes in an effort to test the usefulness of the model as an explanatory tool for reactions to culture contact. As a device to isolate, evaluate, and explain behavior and outcomes, stimulated by contact, the modelling of decision-making

processed is considered to be worthwhile. Its strengths lie in several related areas: (1) it has the ability to look at individual decision-making behavior, as a catalyst for group consensus based decisions, (2) the model accounts for adaptive strategies, (3) it accounts for the active participation in decision-making by Native Americans, undertaken in a contact context, (4) it accounts for the fluid and flexible nature of complex egalitarian culture group systems, where incorporation, adoption, adaptation, and accommodation are viable mechanisms to regulate the impact of contact, and (5) it allows for change to occur, with simultaneous continuity. As a system, the culture must have a set of built in devices to manage deviant behavior. This would have been necessary even before contact, as systems were faced with new options and problems, mandating mechanisms with the ability to solve those problems and make security-oriented decisions.

A weakness of the model of decision-making is in its inability to measure change or continuity in a quantifiable manner. Thus, the degree or magnitude of systemic alteration must be looked at from a long-profile temporal perspective, in order to evaluate system qualities that may be affected. However, it is felt that quantifying culture change is best left to studies which assess system energy and matter considerations. The flow of information through a system, as an integral component of the decision-making

processes, is more appropriately examined through its qualitative features and relation to subsystem operation.

Briefly, a consideration of culture contact, specifically the Huron and French, based on acculturation theory, would be expected to yield different conclusions, than those derived from decision-making and adaptive strategies. In fact, the case of the Huron has already been subjected to the principles of acculturation by numerous scholars. These studies, as previously introduced, yield the same conclusion: the Huron were acculturated by 1650 and the collapse of their traditional system resulted in or allowed for their slaughter by the Iroquois in 1649-1650 (cf. Trigger 1978; Tooker 1964; Heidenreich 1971, 1978): (1) "The disintegration of traditional Huron society began with a series of epidemics that lasted from 1634 to 1640 ..." (Heidenreich 1978:387), (2) "... their achievements were doomed to destruction in 1649 by the Five Nations' need for more abundant supplies of beaver pelts, intertribal and international competition, and French interference in Huron life in support of Jesuit mission policy" (Trigger 1984:24) and, (3) "Our knowledge of the Huron ... [begins] with their first extensively described contact with the French and ending with their defeat and dispersal by the Iroquois in 1649-50 ..." (Tooker 1964:3).

In some regards, acculturation theory tends to view culture contact through a more historical than anthropological perspective. The historical events are the

focus, not the people the events are about. The general systems approach to modelling decision-making processes provides the opportunity to look at the people through the examination of past events. In particular, decision-making processes, as a model for explaining behavior in a culture contact context, provide a means with which to provide individuals with the opportunity to create their own history. Integral to decision-making is the ability of individuals to recognize problems, evaluate options within norms and goals, and reflecting on previous information, in order to process rational and beneficial decisions. Acculturation theory imparts that native groups were unable to control their future, as if they were on an inevitable one-way trip to cultural disaster. Worse yet, if the role of decision-making were assumed to be operative within acculturation, then Native American groups consistently made decisions with deleterious consequences for their survival. Since it cannot be assumed that they would do this consciously, the irrational choices would have had to have been made unconsciously!

The case of the Huron, as applied to decision-making, yields the conclusion that the members of this group were capable of encountering new or foreign items and ideas, and processing decisions based on shared group goals, norms, and security. This procedure was founded on the principles of egalitarianism and reciprocal relations, lending cohesion to the group and its identity. It is suggested that changes in

population numbers, settlement or subsistence patterns, or even material culture do not explain or even cause a system to change or deteriorate. Major alterations in the underlying fundamental operating mechanisms of egalitarianism and reciprocity are required before the system would experience the kind of dislocation thought to have occurred by some scholars. The Huron implemented decisions based on incorporation, adaptation, adoption, and accommodation or rejection of new elements. They selected what was beneficial to individuals or groups. Evidence used in this study allows for the conclusion to be that the Huron system, and in particular reciprocity and egalitarianism, experienced subtle changes through time upon contact, which did not result in the demise of the system, but rather its continuity.

The model of decision-making, as it is presented here, has been devised as a general explanatory tool for culture contact contexts. The case of the Huron was only one of many complex egalitarian culture groups which could be used to test the model. It is suggested that future researchers of cultures in contact utilize this model, with another case study, such as the Neutral or one of the Five Nations groups, offering model refinements. The process of decision-making could easily yield an outcome whereby a different group with different circumstances, influences, and options, made different decisions, that could have resulted in eventual system dislocation. Nonetheless, the

model allows for active participation by any Native American group in a culture contact context.



## Endnotes: Chapter 8

<sup>1</sup> Returning to the problems expounded upon in Chapter 1, dividing the social organization of culture groups into types, bands, tribes, chiefdoms, has been found to be confining. It does not provide the necessary baseline from which to pursue anthropological studies. However, the concept of a complex egalitarian culture group, with no list of criteria for a group's inclusion, is more flexible and fluid for analyses. It offers some operating parameters about expectations of a group's behavior. It does not specify a list of traits a group must possess before it can be included in a social organization category. Likewise, it is felt that conceptualization of how a particular level of social organization is structured and functions, i.e., how they define, organize, and put bounds on their time and space, is thought to be a more useful tool for exploring topics, such as change and continuity. It is preferable to make operating assumptions about a culture system, rather than just label it as 'band,' 'tribe,' or 'chiefdom.'



## BIBLIOGRAPHY

## BIBLIOGRAPHY

Adams, A.T.

- 1961 The Explorations of Pierre Esprit Radisson. Ross and Haines, Minneapolis.

Adams, Richard N.

- 1975 Energy and Structure: A Theory of Social Power. University of Texas Press, Austin.

Alland, Alexander, Jr.

- 1970 Adaptation in Cultural Evolution: An Approach to Medical Anthropology. Cambridge University, New York.

Anderson, Dean L.

- 1990 Personal communication. The Museum, Michigan State University, East Lansing.

Anderson, Gary Clayton

- 1984 Kinsmen of Another Kind: Dakota-White Relations in the Upper Mississippi Valley, 1650-1862. University of Nebraska Press, Lincoln.

Ashby, W.R.

- 1956 An Introduction to Cybernetics. University Press, London.

Axtell, James

- 1981 The European and the Indian: Essays in the Ethnohistory of Colonial North America. Oxford University Press.

- 1985 The Invasion Within: The Contest of Cultures in Colonial North America. Oxford University Press, New York.

Bailey, Alfred

- 1937 The Conflict of European and Eastern Algonkian Cultures, 1504-1700: A Study in Canadian Civilization. New Brunswick Museum, St. Johns.

Bales, Robert F.

- 1950 Interaction Process Analysis: A Method for the Study of Small Groups. Addison-Wesley, Massachusetts.

- Bales, Robert F., and Fred Strodbeck  
 1951 Phases in Group Problem-Solving. Journal of Abnormal and Social Psychology 46:485-495.
- Barbeau, C.M.  
 1915a Huron and Wyandot Mythology. Anthropology Series, Geological Survey Memoir 80(11). Ottawa.  
 1915b Wyandot Tales. Journal of American Folk Lore 28:83-95.  
 1917 Iroquoian Clans and Phratries. American Anthropologist 19:392-402.
- Barger, W.K.  
 1977 Culture Change and Psychosocial Adjustment. American Ethnologist 4:471-495.
- Barlett, Peggy F.  
 1977 The Structure of Decision Making in Paso. American Ethnologist 4:285-308.
- Beaudry, Mary C. (editor)  
 1988 Documentary Archaeology in the New World. Cambridge University Press, Cambridge.
- Bennett, John  
 1973 A Guide to the Collection. In J. Bennett (editor), The New Ethnicity: Perspectives from Ethnology, pp. 3-10. Proceedings of the American Ethnological Society, West Publishing, St. Paul.
- Berger, P.L., and T. Luckmann  
 1966 The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Double Day, New York.
- Bertalanffy, L. von  
 1950 An Outline of General Systems Theory. British Journal of Philosophy of Science 1:134-165.
- Biggar, H. (editor)  
 1936 The Works of Samuel de Champlain (6 vols.). The Champlain Society, Toronto.
- Binford, L.R.  
 1962 Archaeology as Anthropology. American Antiquity 28:217-225.  
 1971 Mortuary Practices: Their Study and Their Potential. In J. Brown (editor), Approaches to the Social Dimensions of Mortuary Practices. Memoirs of the American Archaeological Society 25.

- Bishop, C.  
1979 Review of Keepers of the Game, by Calvin Martin.  
American Anthropologist 81:914-915.
- Bishop, C.A., and A.J. Ray  
1976 Ethnohistorical Research in the Central Subarctic:  
Some Conceptual and Methodological Problems. The  
Western Canadian Journal of Anthropology 4:116-  
144.
- Blackman, Margaret  
1976 Creativity in Acculturation: Art, Architecture, and  
Ceremony from the Northwest Coast. Ethnohistory  
23(4):387-413.
- Blair, Emma H. (editor)  
1911-1912 The Indian Tribes of the Upper Mississippi  
Valley and Region of the Great Lakes, as Described by  
Nicolas Perrot, French Commandant in the Northwest;  
Bacqueville de la Potherie, French Royal Commissioner to  
Canada; Morrell Marston, American Army Officer; and  
Thomas Forsyth, United States Agent at Fort Armstrong  
(2 vols.). Arthur H. Clark, Cleveland.
- Blanchard, David  
1982 ... To the Other Side of the Sky: Catholicism at  
Kahnawake, 1667-1700. Anthropologica 24:77-102.
- Blasingham, Emily  
1956 Depopulation of the Illinois Indians. Ethnohistory  
3:193-224, 361-412.
- Bloom, Leonard, et al.  
1954 Acculturation: An Exploratory Formulation.  
American Anthropologist 56:973-1002.
- Blu, Karne F.  
1980 The Lumbee Problem: The Making of an American  
Indian People. Cambridge.
- Boucher, P.  
1883 Canada in the Seventeenth Century (1664).  
Translated by E.L. Montizambert. George E. Debarats,  
Montreal.
- Boulding, Kenneth  
1956 General Systems Theory - The Skeleton of Science.  
Management Science 2:197-208.
- Bradley, James W.  
1987 Evolution of the Onondaga Iroquois: Accommodating  
Change, 1550-1655. Syracuse University Press, New  
York.

Branstner, Susan M.

1984 Archaeological Investigations at the Marquette Mission Site, 20MK82: 1983. Michigan State University Museum. Submitted to the St. Ignace, Michigan Downtown Development Authority. Copies available from Michigan State University Museum, East Lansing.

1985 Archaeological Investigations at the Indian Village Associated with the Marquette Mission Site, St. Ignace Michigan (20MK82/20MK99): 1984. Michigan State University Museum. Submitted to the St. Ignace, Michigan, Downtown Development Authority. Copies available from the Michigan State University Museum, East Lansing.

1986 Archaeological Investigations at the Indian Village Associated with the Marquette Mission Site, St. Ignace Michigan (20MK82/20MK99): 1985. Michigan State University Museum. Submitted to the St. Ignace, Michigan, Downtown Development Authority. Copies available from the Michigan State University Museum, East Lansing.

1987 Archaeological Investigations at the Indian Village Associated with the Marquette Mission Site, St. Ignace Michigan (20MK82/20MK99): 1986. Michigan State University Museum. Submitted to the St. Ignace, Michigan, Downtown Development Authority. Copies available from the Michigan State University Museum, East Lansing.

1989 Cultural Resource Monitoring and Analysis of the Waste Water Treatment System Installation (1987-1989), St. Ignace, Michigan. Great Lakes Research. Submitted to the City of St. Ignace. Copies available from Great Lakes Research, Williamston, Michigan.

Braroe, Niels W.

1975 Indian and White: Self Image and Interaction in a Canadian Plains Community. Stanford.

Brashler, Jan

1981 Early Late Woodland Boundaries and Interaction: Indian Ceramics of Southern Lower Michigan. Publications of The Museum, Anthropological Series 3:207-359. Michigan State University, East Lansing.

Brasser, T.J.

1978 Early Indian-European Contacts. In Handbook of North American Indians: 15 Northeast. Bruce Trigger, (editor), pp. 78-88. Smithsonian Institution, Washington, D.C.





- Braun, David P., and Stephen Plog  
 1982 Evolution of "Tribal" Social Networks: Theory and Prehistoric North American Evidence. American Antiquity 47:504-525.
- Brenner, Elsie  
 1988 Sociopolitical Implications of Mortuary Ritual Remains in Seventeenth Century Native Southern New England. In Mark Leone and Parker Potter (editors), The Recovery of Meaning: Historical Archaeology in the Eastern United States, pp. 147-181. Smithsonian Institution, Washington, D.C.
- Brown, Margaret Kimball  
 1979 Cultural Transformations Among the Illinois: An Application of a Systems Model. Publications of The Museum Anthropological Series 1(3), Michigan State University, East Lansing.
- 1989 Documents and Archaeology in French Illinois. Paper presented at the French Colonial Archaeology Conference, April 1989, Springfield, Illinois.
- Buckley, Walter F.  
 1967 Sociology and Modern Systems Theory. Prentice-Hall, New Jersey.
- 1968 Modern Systems Research for the Behavioral Scientist. Aldine, Chicago.
- Campeau, Lucien, S.J.  
 1987 La Mission des Jesuites Chez Les Hurons 1634-1650. Editions Bellarmin, Montreal.
- Carneiro, R.  
 1970 A Theory on the Origin of the State. Science 169:733-738.
- Childe, V. Gordon  
 1951 Man Makes Himself. New American Library of World Literature, New York.
- Clarke, David L.  
 1978 Analytical Archaeology. Methuen, London.
- Clarke, D.L. (editor)  
 1972 Models in Archaeology. London.
- Clarke, Peter Dooyentate  
 1870 Origin and Traditional History of the Wyandots. Hunter and Rose, Toronto.

Cleland, Charles E. (editor)

- 1971 The Lasanen Site: An Historical Burial Locality in Mackinac County, Michigan. Publications of The Museum, Anthropological Series 1, Michigan State University, East Lansing.

Cleland, Nancy

- 1987 Summary of 1983-1986 Seasons Ethnobotanical Remains. In Susan Branster (editor), Archaeological Investigations at the Indian Village Associated with the Marquette Mission Site, St. Ignace Michigan, 20MK82/20MK99): 1986. Michigan State University Museum. Submitted to the St. Ignace, Michigan, Downtown Development Authority. Copies available from the Michigan State University Museum, East Lansing.

Clifton, James A.

- 1983 The Re-emergent Wyandot: A Study in Ethnogenesis on the Detroit River Borderland, 1747. Papers from the Western District Conference. Essex County Historical Society and the Western District Council, Windsor.

- 1989 Being and Becoming Indian: Biographical Studies of Native American Frontiers. Dorsey, Illinois.

Collins, Barry, and Harold Guetzkow

- 1964 A Social Psychology of Group Processes for Decision-Making. John Wiley, New York.

Conkling, Robert

- 1974 Legitimacy and Conversion in Social Change: The Case of French Missionaries and the Northeastern Algonkian. Ethnohistory 21:1-24.

Connelley, William E.

- 1899 The Wyandot. 12th Annual Archaeological Report 12:92-123. Ontario.

Crosby, Constance A.

- 1988 From Myth to History. In Mark Leone and Parker Potter (editors), The Recovery of Meaning: Historical Archaeology in the Eastern United States, pp. 183-209. Smithsonian Institution, Washington, D.C.

Crowell, Laura, and Thomas Scheidel

- 1961 Categories for Analysis of Idea Development in Discussion Groups. Journal of Social Psychology 54:155-268.

Culin, Stewart

- 1975 Games of the North American Indians. Reprint of 1907 edition. Dover, New York.

- Dawson, K.C.A.  
1979 Algonkian Huron-Petun Ceramics in Northern Ontario.  
Man in the Northeast 18:14-31.
- Dewey, John  
1910 How We Think. Heath, New York.
- Dodd, C.F.  
1984 Ontario Tradition Longhouses. National Museum of Man Mercury Series 124. Ottawa.
- Dohrenwned, Bruce, and Robert J. Smith  
1962 Toward a Theory of Acculturation. Southwestern Journal of Anthropology 18:30-39.
- Donaldson, W.S.  
1962 Archaeological Research in the Rouge. Ontario Archaeologist Series A, No. 5.
- Drennan, R.  
1976 Religion and Social Evolution in Formative Mesoamerica. In Kent Flannery (ed.), The Early Mesoamerican Village. Academic Press, New York.
- Duignan, Peter  
1958 Early Jesuit Missionaries: A Suggestion for Further Study. American Anthropologist 60:725-732.
- Dumond, Don  
1972 Population Growth and Political Centralization. In B. Spooner (editor), Population Growth: Anthropological Implications, pp. 286-310. MIT Press, Cambridge, Mass.
- Durham, William  
1981 Overview: Optimal Foraging Analysis in Human Ecology. In B. Winterhalder and E. Smith (editors), Hunter-Gatherer Foraging Strategies, pp. 218-232. University of Chicago Press, Chicago.
- Egan, Kathryn  
1988 Ethnobotanical Analysis of Remains from Late Seventeenth Century Features at the Huron Villages Associated with the Marquette Mission Site. Ms. on file at The Museum, Michigan State University, East Lansing.
- Eccles, W. J.  
1983 The Fur Trade and Eighteenth Century Imperialism. William and Mary Quarterly 40:341-362.
- Ellen, Roy  
1971 Environment, Subsistence, and System: The Ecology of Small Scale Social Formations. Cambridge University Press, Cambridge.

- Fagan, Brian  
1984 Clash of Cultures. W.H. Freeman, New York.
- Fenton, William  
1971 The Iroquois in History. E. Leacock and N. Lurie (editors), North American Indians in Historical Perspective, pp. 129-168. Random House, New York.
- Fiedler, Fred E.  
1964 A Contingency Model of Leader Effectiveness. In Leonard Berkowitz (editor), Advances in Experimental Social Psychology 1:149-190. Academic Press, New York.  
  
1967 A Theory of Leader Effectiveness. McGraw-Hill, New York.
- Finlayson, W.D.  
1990 Personal communication. Museum of Indian Archaeology, London, Ontario.  
  
1985 The 1975 and 1978 Rescue Excavations at the Draper Site. National Museum of Man Mercury Series 130. Ottawa.
- Finley, James B.  
1840 History of the Wyandott Mission at Upper Sanduskey, Ohio. J.F. Wright and L. Swormstedt for the Methodist Episcopal Church, Cincinnati.
- Firth, Raymond  
1955 The Fate of the Soul: An Interpretation of Some Primitive Concepts. Cambridge University Press, Cambridge.
- Fisher, B. Aubrey  
1970 Decision Emergence: Phases in Group Decision Making. Speech Monographs 37:53-66.  
  
1980 Small Group Decision Making: Communication and the Group Process. McGraw-Hill, New York.
- Fisher, Robin  
1977 Contact and Conflict: Indian-European Relations in British Columbia, 1774-1890. University of British Columbia Press, Vancouver.
- Fitting, James E.  
1976a Patterns of Acculturation at the Straits. In C. Cleland (editor), Cultural Change and Continuity, Essays in Honor of James Bennett Griffin, pp. 321-334. Academic Press, New York.

- 1976b Archaeological Excavations at the Marquette Mission Site, St. Ignace, Michigan. The Michigan Archaeologist 22(2-3).
- 1980 Te Oskoniae: The Village of the Tionontate Huron at Michilimackinac, 1671-1701. Ms. held at the Bureau of History, Michigan Department of State, Lansing.
- Fitzgerald, William R.  
 1982 Lest the Beaver Run Looses: The Early 17th Century Christianson Site and Trends in Historic Neutral Archaeology. National Museum of Man Mercury Series 111. Ottawa.
- 1986 Is the Warminster Site Champlain's Cahiaque. Ontario Archaeology 45:3-8.
- Fitzhugh, William W. (editor)  
 1985 Cultures in Contact: The European Impact on Native Cultural Institutions in Eastern North America A.D. 1000-1800. Smithsonian Institution, Washington, D.C.
- Flannery, Kent V.  
 1967 Culture History v. Culture Process: A Debate in American Archaeology. Scientific American 217:119-122.
- 1968 Archaeological Systems Theory and Early Mesoamerica. In Betty Meggers (editor), Anthropological Archaeology in the Americas, pp. 67-87. Anthropological Society of Washington, Washington, D.C.
- 1972 The Cultural Evolution of Civilisations. Annual Review of Ecology and Systematics 3:399-426.
- Flannery, K.V. (editor)  
 1976 The Early Mesoamerican Village. Academic Press, New York.
- 1986 Guila Naquitz: Archaic Foraging and Early Agriculture in Oaxaca, Mexico. Academic Press, New York.
- Flannery, K.V. and J. Marcus  
 1976 Formative Oaxaca and the Zapotec Cosmos. American Scientist 64:374-383.
- Francis, D., and Toby Morantz  
 1983 Partners in Furs: A History of the Fur Trade in Eastern James Bay, 1600-1870. McGill-Queen's University Press, Kingston.

- Fried, Morton H.  
 1966 On the Concept of "Tribe" and "Tribal" Society.  
Transactions of the New York Academy of Sciences,  
 Series II, 28:527-540.
- 1975 The Notion of Tribe. Benjamin-Cummings, California.
- Garrad, Charles  
 1989 The Plater-Fleming BdHb-2 Site: A Review. Arch  
Notes 89(3):7-25.
- 1977 Some Petun Area Data. Arch Notes 77(4):7-14.
- Garrad, C., and Conrad E. Heidenreich  
 1978 Khionontateronon (Petun). In Bruce Trigger  
 (editor) Handbook of North American Indians: 15  
Northeast. Smithsonian Institution, Washington, D.C.
- Gibbs, Jack  
 1965 Norms: The Problem of Definition and Classification.  
American Journal of Sociology 70:586-594.
- Gillen, John and B. Raimy  
 1940 Acculturation and Personality. American  
Sociological Review 5:351-380.
- Gillispie, B.C.  
 1976 Changes in Territory and Technology of the Chippewa.  
Arctic Anthropology 13(1).
- Gluckman, Max  
 1965 Politics, Law, and Ritual in Tribal Society.  
 Aldine, Chicago.
- Gould, Louis  
 1929 Potier's Essex County Census. Ms. on file at the  
 Burton Historical Library, Detroit.
- Graburn, N.  
 1971 Traditional Economic Institutions and the  
 Acculturation of Canadian Eskimos. In G. Dalton  
 (editor), Studies in Economic Anthropology, pp. 53-74.  
 American Anthropological Association, Washington, D.C.
- Grant, J. W.  
 1984 Moon of Wintertime: Missionaries and the Indians of  
Canada in Encounter Since 1534. University of Toronto  
 Press, Toronto.
- Greenman, Emerson  
 1958 An Early Historic Cemetery at St. Ignace, Michigan.  
The Michigan Archaeologist 4:28-35.

- Gross, D. R.  
1979 Ecology and Acculturation Among Native Peoples of Central Brazil. Science 206:1043-1050.
- Guillemin, Jeanne  
1974 The Cultural Strategy of American Indians. New York.
- Hall, A.D. and R. Fagen  
1956 Definition of a System. General Systems Yearbook 1:18-28.
- Hall, Thomas  
1989 Acculturation, Assimilation, Incorporation: What's in A Name? Paper Presented at Ethnohistory meeting, Chicago, Illinois.
- Hammel, George  
1983 Trading in Metaphors: The Magic of Beads. In Charles Hayes III (editor), Proceedings of the 1982 Glass Trade Bead Conference, pp. 5-28. Rochester Museum and Science Center, New York.
- Hanna, Charles A.  
1911 The Wilderness Trail (2 vols.). Putnam, New York.
- Harris, Marvin  
1975 Culture, People, Nature: An Introduction to General Anthropology (2nd edition). T.Y. Crowell, New York.  
  
1979 Cultural Materialism: The Struggle for a Science of Culture. Random House, New York.
- Hayden, Brian  
1977 Corporate Groups and the Late Ontario Iroquois Longhouse. Ontario Archaeologist 28:3-16.  
  
1978 Bigger is Better? Factors Determining Ontario Iroquois Sites Sizes. Canadian Journal of Archaeology 2:107-116.
- Hayden, B. (editor)  
1979 Settlement Patterns of the Draper and White Sites: 1973 Excavations. Simon Fraser University, Department of Archaeology 6. Burnaby.
- Healy, George  
1958 The French Jesuits and the Idea of the Noble Savage. William and Mary Quarterly 15.
- Heath, Anthony  
1976 Rational Choice and Social Exchange: A Critique of Exchange Theory. Cambridge University Press, Cambridge.

Heidenreich, Conrad

1967 The Indian Occupance of Huronia 1600-1650. In R. Louis Gentilcore (editor), Canada's Changing Geography. Prentice Hall of Canada, Ontario.

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

1978 Huron. In Bruce Trigger (editor), Handbook of North American Indians: 15 Northeast. Smithsonian Institution, Washington, D.C.

1986 Native Studies Review 2:140-147.

Heidenreich, C., and A. Ray

1976 The Early Fur Trades: A Study in Cultural Interaction. McClelland and Stewart, Toronto.

Helm, June

1968 The Nature of Dogrib Terretorial Groups. In R. Lee and I. DeVore (editors), Man the Hunter, pp. 118-125. Aldine, Chicago.

Herskovitz, Melville

1938 Acculturation; the Study of Culture Contact. Augustine, New York.

Hewitt, J.N.B.

1903-1928 Iroquoian Cosmology. Annual Report of the Bureau of American Ethnology 21 and 43, Washington, D.C.

Hicks, George, and Philip E. Leis

1977 Ethnic Encounters: Identities and Contexts. Belmont, California.

Hill, J.N. (editor)

1977 The Explanation of Prehistoric Change. University of New Mexico Press, Albuquerque.

Hodder, Ian

1986 Reading the Past: Current Approaches to Interpretation in Archaeology. Cambridge University Press, Cambridge.

Hodder, Ian (editor)

1982 Symbolic and Structural Archaeology. Cambridge University Press, Cambridge.

1987 The Archaeology of Contextual Meanings. Cambridge University Press, Cambridge.



- Hoffman, L. Richard  
 1979 The Group Problem Solving Process. Praeger, New York.
- Hopkins, Terence K.  
 1964 The Exercise of Influence in Small Groups. Bedmenster, New Jersey.
- Hopkins, Terence K., and Immanuel Wallerstein (editors)  
 1980 Processes of the World-System. Sage, London.
- 1982 World-Systems Analysis: Theory and Methodology. Fernand Braudel Center for the Study of Economics, Historical Systems and Civilizations.
- Hunt, George T.  
 1940 The Wars of the Iroquois: A Study in Intertribal Trade Relations. University of Wisconsin Press, Madison.
- Hunter, James  
 1985 The Implications of Firearms Remains from Sainte Marie Among the Hurons, A.D. 1639-1649. In Hayes (editor), Proceedings of the 1984 Trade Gun Conference. Rochester Museum of Science, New York.
- Innis, H.A.  
 1956 The Fur Trade in Canada: An Introduction to Canadian Economic History (2nd edition). University of Toronto, Toronto.
- Jaenen, Cornelius  
 1976 Friend or Foe: Aspects of French-Amerindian Cultural Contact in the Sixteenth and Seventeenth Centuries. McClelland and Stewart, Toronto.
- Jennings, Francis  
 1984 The Ambiguous Iroquois Empire. Norton, New York.
- Jochim, Michael  
 1976 Hunter-Gatherer Subsistence and Settlement: A Predictive Model. Academic Press, New York.
- 1981 Strategies for Survival: Cultural Behavior in an Ecological Context. Academic Press, New York.
- Johnson, David S.  
 1980 The Mckenzie or Woodbridge Site (AkGv-2), and its Place in the Late Ontario Iroquois Tradition. AENA 8:77-87.

- Johnson, G.  
 1982 Organisational Structure and Scalar Stress. In A. Renfrew, M. Rowlands, B. Seagrave (eds.), Theory and Explanation in Archaeology. Academic Press, New York.
- Johnston, Richard, and L.J. Jackson  
 1980 Settlement Pattern at the Le Caron Site, a 17th Century Huron Village. Journal of Field Archaeology 7:173-199.
- Jury, Wilfred, and Elsie Jury  
 1955 Saint Louis: Huron Indian Village and Jesuit Mission Site. University of Western Ontario, Museum of Indian Archaeology 10:1-76.
- Kapches, Mima  
 1976 The Interment of Infants of the Ontario Iroquois. Ontario Archaeologist 27:29-39.  
 1979 Intra-longhouse Spatial Analysis. Pennsylvania Archaeologist 49(4):24-29.  
 1980 Wall Trenches on Iroquoian Sites. AENA 8:98-104.  
 1984 Cabins of Ontario Iroquois Sites. North American Archaeologist 5(1):63-71.  
 1990 The Spatial Dynamics of Ontario Iroquoian Longhouses. American Antiquity 55:49-67.
- Kellog, Louise (editor)  
 1917 Early Narratives of the Northwest, 1634-1699. Scribner's Sons, New York.
- Keene, Arthur S.  
 1981 Prehistoric Foraging in a Temperate Forest: A Linear Programming Model. Academic Press, New York.
- Keesing, Roger, and Felix Keesing  
 1971 New Perspectives in Cultural Anthropology. Holt, Rinehart, and Winston, New York.
- Kenyon, Walter  
 1982 The Grimsby Site: A Historic Neutral Cemetery. Royal Ontario Museum, Toronto.
- Kidd, Kenneth  
 1949 The Excavation of Sainte Marie. Oxford University Press, Toronto.  
 1953 The Excavation and Identification of a Huron Ossuary. American Antiquity 18:359-379.

- Kinietz, W. Vernon  
 1965 Indians of the Western Great Lakes, 1615-1760.  
 University of Michigan Press, Ann Arbor.
- Kirch, Patrick V.  
 1982 The Archaeological Study of Adaptation: Theoretical and Methodological Issues. In Michael Schiffer (editor), Advances in Archaeological Method and Theory: Selections for Students, Vols. 1-4, pp. 101-156. Academic Press, New York.
- Knight, Dean  
 1978 The Ball Site: A Preliminary Statement. Ontario Archaeology 29:53-63.
- Knight, Dean, and Jerry Melbye  
 1983 Burial Patterns of the Ball Site. Ontario Archaeology 40:37-48.
- Kowitz, Albert, and Thomas Knutson  
 1980 Decision Making in Small Groups: The Search for Alternatives. Allyn and Bacon, Boston.
- Krech, Shepard  
 1976 The Fur Trade and the Eastern Kutchin, 1800-1860. Ethnohistory 23:213-235.
- 1978 Disease, Starvation, and Northern Athapaskan Social Organization. American Ethnologist 5:710-732.
- Krech, Shepard (editor)  
 1981 Indians, Animals, and the Fur Trade: A Critique of Keepers of the Game. The University of Georgia Press, Athens.
- 1984 The Subarctic Fur Trade. University of British Columbia Press, Vancouver.
- Kroeber, A.L.  
 1939 Cultural and Natural Areas of Native North America. Publications in American Archaeology and Ethnology 38. University of California, Berkeley.
- Kroeber, A.L., and C. Kluckhohn  
 1952 Culture: A Critical Review of Concepts and Definitions. Harvard University Papers of the Peabody Museum of American Archaeology and Ethnology 47. Cambridge, Mass.
- Latta, Martha  
 1976 The Iroquoian Cultures of Huronia: A Study of Acculturation through Archaeology. Ph.D. Dissertation, Department of Anthropology, University of Toronto.

- 1980 Controlling the Heights: The Iroquoian Occupations of the Albion Pass Region. AENA 8:71-76.
- 1983 The Auger Site, BdGw - 3. Report to the Minister of Citizenship and Culture and the Ontario Heritage Foundation.
- 1985 A Seventeenth Century Attibneenongnahac Village: Settlement Patterns at the Auger Site (BdGw-3). Ontario Archaeologist 44:41-54.
- Leakey, Richard, and R. Lewin  
1978 People of the Lake. Anchor Press, New York.
- Lennox, Paul  
1981 The Hamilton Site: A Late Historic Neutral Town. National Museum of Man Mercury Series 103. Ottawa.
- 1984 The Hood Site: An Historic Neutral Town of 1640 A.D. and The Bogle I and Bogle II Sites: Historic Neutral Hamlets. National Museum of Man Mercury Series 121. Ottawa.
- Leone, Mark, and Parker Potter Jr. (editors)  
1988 The Recovery of Meaning: Historical Archaeology in the Eastern United States. Smithsonian Institution, Washington, D.C.
- Levi-Strauss, C.  
1945 Analysis of Structure in Linguistics and Anthropology. Word 1:33-53.
- Linton, Ralph  
1940 Acculturation in Seven American Indian Tribes. Appelton-Century, New York.
- Mainfort, Robert  
1979 Indian Social Dynamics in the Period of European Contact. Anthropological Series 1(4). Publications of The Museum, Michigan State University, East Lansing.
- 1985 Wealth, Space, and Status in a Historic Indian Cemetery. American Antiquity 50:555-579.
- Margry, Pierre  
1876 Decouvertes et etablissements des Francais dans l 'Amerique septennonale (Vol. 4). English translation in ms. at Burton Historical Collection, Detroit Public Library.
- Martin, Calvin  
1975 The Four Lives of a Micmac Copper Pot. Ethnohistory 22:111-133.

- 1978 Keepers of the Game: Indian-Animal Relationships and the Fur Trade. University of California Press, Berkeley.
- Martin, Patrick, and Robert Mainfort  
 1985 The Battle Point Site: A Late Historic Cemetery in Ottawa County, Michigan. Arctic Anthropology 22:115-130.
- Maruyama, M.  
 1963 The Second Cybernetics: Deviation-Amplifying Mutual Causal Processes. American Scientist 51:164-179.
- Mason, Carol I.  
 1988 Introduction to Wisconsin Indians: Prehistory to Statehood. Sheffield, Wisconsin.
- Mason, Ronald  
 1974 Huron Island and the Island of the Poutouatamis. In Elden Johnson, (editor) Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford. University of Minnesota Press, St. Paul.
- 1986 Rock Island: Historical Indian Archaeology in the Northern Lake Michigan Basin. MCJA Special Paper 6, Kent State University Press, Ohio.
- Mauss, Marcel  
 1967 The Gift: Forms and Functions of Exchange in Archaic Societies. W.W. Norton, New York.
- McLeod, Jack, and Steven Chaffee  
 1972 The Construction of Social Reality. In James Tedeschi (editor), The Social Influence Processes, pp. 50-99. Aldine, New York.
- McIlwraith, T.F.  
 1946 Archaeological Work in Huron 1946: Excavations Near Warminster. Canadian Historical Review 27:394-401.
- McNeill, W.H.  
 1976 Plagues and Preachers. Anchor Books, Garden City.
- MacNeish, R.S.  
 1952 Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory. National Museum of Canada 124. Ottawa.
- Mesthene, Emmanuel  
 1970 Technological Change and Its Impact on Man and Society. Harvard University Press, Cambridge.

- Michigan Pioneer and Historical Collections (MPHC)  
 1903-1904 Cadillac Papers. Michigan Pioneer and  
 Historical Collections 33-34. Robert Smith Printing,  
 Lansing.
- Middleton, J., and D. Tait (editors)  
 1958 Tribes Without Rulers: Studies in African Segmentary  
 Systems. Routledge and Kegan Paul, London.
- Miller, C., and G. Hammel  
 1986 A New Perspective on Indian-White Contact: Cultural  
 Symbols and Colonial Trade. Journal of American  
 History 73:311-328.
- Moore, James  
 1981 The effects of Information Networks in Hunter-  
 Gatherer Societies. In B. Winterhalder and E. Smith  
 (editors), Hunter-Gatherer Foraging Strategies, pp. 194-  
 217. University of Chicago Press, Chicago.
- Morgan, Lewis H.  
 1901 League of the Ho-de-no-sau-nee or Iroquois.  
 Herbert Lloyd (editor), 2 vols. Reprinted by  
 HRAF, New Haven.
- Morrison, Kenneth  
 1984 The Embattled Northeast: The Elusive Ideal of  
 Alliance in Abenaki-Euramerican Relations. University  
 of California Press, Berkeley.
- Morrissonneau, Christian  
 1978 Huron of Lorette. In Bruce Trigger (editor), The  
 Handbook of North American Indians: 15 Northeast.  
 Smithsonian Institution, Washington, D.C.
- Murphy, Robert F., and Julian H. Steward  
 1956 Tappers and Trappers: Parallel Processes in  
 Acculturation. In Economic Development and Culture  
 Change 4:335-355.
- Nern, Craig, and Charles Cleland  
 1974 The Gros Cap Cemetery Site, St. Ignace, Michigan:  
 A Reconsideration of the Greenlees Collection.  
The Michigan Archaeologist 20:1-58.
- Nooter, G.  
 1976 Leadership and Headship: Changing Authority Patterns  
 in an East Greenland Hunting Community. Brill, Ledian.

- Ostreicher, Pamela H.  
 1981 On the White Man's Road: Acculturation and the Fort Marion Southern Plains Prisoners. Ph.D. dissertation, Anthropology Department, Michigan State University, East Lansing.
- Parker, Arthur  
 1989 Seneca Myths and Folk Tales. Reprint of 1923 edition. University of Nebraska Press, Lincoln.
- Pearce, Robert  
 1989 Preliminary Assessment of Site BdHb-2, Collingwood Township, Ontario. Arch Notes 89-2:9-15.
- Peterson, R.  
 1973 On the Variation of Settlement Patterns and Hunting Conditions in Three Districts of Greenland. In G. Berg (editor), Circumpolar Problems, pp. 153-162. Pergamon, Oxford.
- Polanyi, Karl  
 1975 Traders and Trade. In J. Sabloff and C.C. Lamberg-Karlovsky (editors), Ancient Civilization and Trade. Albuquerque, New Mexico.
- Porter, Frank W., III (editor)  
 1975 Strategies for Survival: American Indians in the Eastern United States. Greenwood Press, New York.
- Potier, Pierre  
 1920 Elementa Grammaticae. 15th Report of Bureau of Archives for the Province of Ontario for the Years 1918-1919. Alexander Fraser (editor), for 1747, Clarkson W. James.
- Powell, J.J.  
 1881 Wyandot Government. Bureau of American Ethnology Annual Report 1:57-69.
- Pratt, Peter  
 1976 Archaeology of the Oneida Iroquois. Occasional Papers in Northeastern Archaeology 1(1). George's Mill.
- Quaife, Milo (editor)  
 1962 Cadillac. In The Western Country in the 17th Century. Citadel Press, New York.
- Quimby, George I.  
 1939 Aboriginal Camp Sites on Isle Royale, Michigan. American Antiquity 4:215-223.

- 1966 Indian Culture and European Trade Goods: The Archaeology of the Historic Period in the Western Great Lakes Region. University of Wisconsin Press, Madison.
- Radcliffe-Brown, A.R.  
 1952 Structure and Function in Primitive Society. Free Press, New York.
- 1958 Method in Social Anthropology. University of Chicago Press, Chicago.
- Ramsden, Peter  
 1977 A Refinement of Some Aspects of Huron Ceramic Analysis. National Museum of Man Mercury Series 63. Ottawa.
- 1981 Rich Man, Poor man, Dead Man, Thief: The Dispersal of Wealth in 17th Century Huron Society. Ontario Archaeology 35:35-40.
- Rapoport, Anatol  
 1953 What is Information? ETC. 10:247-160.
- 1960 Fights, Games and Debates. University of Michigan Press, Ann Arbor.
- 1968 Forward. In W. Buckley (editor), Modern Systems Research for the Behavioral Scientist, pp. xiii-xxii. Aldine, Chicago.
- Rapoport, Anatol (editor)  
 1974 Game Theory as a Theory of Conflict Resolution. Rediel, Boston.
- Rappaport, R.A.  
 1971 Ritual, Sanctity and Cybernetics. American Anthropologist 73:59-76.
- Ray, Arthur J.  
 1974 Indians in the Fur Trade: Their Role as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870. University of Toronto Press.
- Ray, A.J. and Donald Freeman  
 1978 "Give Us Good Measure:" An Economic Analysis of Relations Between the Indians and the Hudson's Bay Company Before 1763. University of Toronto, Toronto.
- Redfield, Robert  
 1953 The Primitive World and its Transformations. Cornell University Press, Ithaca.



- Redman, Charles L.  
 1973 Research and Theory in Current Archaeology: An Introduction. In Research and Theory in Current Archaeology, C. Redman (editor), pp. 5-20. John Wiley, New York.
- Renfrew, Colin  
 1969 Trade and Culture Process in European Prehistory. Current Anthropology 10:51-169.  
 1979 Systems and Subsystem Interaction. In C. Renfrew and K. Cooke (editors), Transformations: Mathematical Approaches to Culture Change, pp. 295-298. Academic Press, New York.  
 1983 Towards an Archaeology of Mind. Cambridge University Press, Cambridge.
- Reynolds, Robert  
 1978 On Modelling the Evolution of Hunter-Gatherer Decision Making Systems. Geographical Analysis 10:31-46.  
 1986 An Adaptive Computer Model for the evolution of Plant Collecting and Early Agriculture in the Eastern Valley of Oaxaca. In K. Flannery (editor), Guila Naquitz, pp. 439-449. Academic Press, New York.
- Reynolds, R., and B.F. Ziegler  
 1979 A Formal Mathematical Model for the Operation of Consensus-based Hunting and Gathering Bands. In A.C. Renfrew (editor), Transformations: Mathematical Approaches to Culture Change, pp. 405-418. Academic Press, New York.
- Richards, Cara  
 1967 Huron and Iroquois Residence Patterns, 1600-1650. In Iroquois Culture, History and Prehistory, ed. by E. Tooker, pp. 51-56. The University of the State of New York, Albany.
- Riches, David  
 1982 Northern Nomadic Hunter-Gatherers: A Humanistic Approach. Academic Press, New York.
- Ridley, Frank  
 1954 The Frank Bay Site, Lake Nipissing, Ontario. American Antiquity 20:40-50.  
 1961 The Lake Superior Site at Michipicoten. Pennsylvania Archaeologist 31:131-147.

- Rindos, David  
 1984 The Origins of Agriculture: An Evolutionary Perspective. Academic Press, New York.
- Ritchie, William  
 1954 Dutch Hollow: An Early Historic Period Seneca Site in Livingston County, New York. Rochester Museum and Science Center, Research Records 10. Rochester, New York.
- Robertson, James  
 1982 Dimensions of Status in Egalitarian Mortuary Systems: A Test Case. Ms. on file at The Museum, Michigan State University, East Lansing.
- Robinson, Paul, M. Kelley, and P. Rubertone  
 1985 Preliminary Biocultural Interpretations from a 17th Century Narragansett Indian Cemetery in Rhode Island. In W. Fitzhugh (editor), Cultures in Contact, pp. 107-130. Smithsonian Institution, Washington, D.C.
- Rogers, E.S.  
 1963 The Hunting Group - Hunting Territory Complex Among the Mistassini Indians. National Museum of Canada Bulletin 195. Ottawa.
- Rotstein, Abraham  
 1970 Karl Polanyi's Concept of Non-Market Trade. Journal of Economic History 30:117-130.  
 1972 Trade and Politics: An Industrial Approach. Western Canadian Journal of Anthropology 3(1):1-28.
- Rutz, Henry J.  
 1977 Individual Decisions and Functional Systems: Economic Rationality and Environmental Adaptation. American Ethnologist 4:156-174.
- Sahlins, Marshall  
 1968 Tribesmen. Prenstice-Hall, New Jersey.  
 1972 Stone Age Economics. Aldine, Chicago.  
 1981 Historical Metaphors and Mythical Realities: Structure in the Early History of the Sandwich Islands Kingdom. The University of Michigan Press, Ann Arbor.
- Saitta, Dean J.  
 1983 On the Evolution of "Tribal" Social Networks. American Antiquity 48:820-824.

- Salmon, Merrilee H.  
 1978 What Can Systems Theory do for Archaeology?  
American Antiquity 43:174-183.
- Scheidel, Thomas and Laura Crowell  
 1964 Idea Development in Small Discussion Groups.  
Quarterly Journal of Speech 50:140-145.
- Schleiser, Karl  
 1976 Epidemics and Indian Middlemen: Rethinking the Wars  
 of the Iroquois, 1609-1653. Ethnohistory 23:129-145.
- Schoolcraft, Henry  
 1851-1857 Historical and Statistical Information  
 Respecting the History, Conditions and Prospects of the  
 Indian Tribes of the U.S. (Vol. 4). Philadelphia.
- Schorer, C.E.  
 1986 Indian Tales of C.C. Trowbridge, Collected from  
 Wyandots, Miamis and Shawnees. Green Oak Press,  
 Brighton, Michigan.
- Service, Elman R.  
 1967 Primitive Social Organization: An Evolutionary  
 Perspective. Random House, New York.
- 1978 Profiles in Ethnology (3rd edition). Harper and  
 Row, New York.
- Sharp, Lauriston  
 1977 Steel Axes for Stone-Age Australians. In J.  
 Spradley and D. McCurdy (editors), Conformity and  
 Conflict, pp. 446-460. Little Brown, Boston.
- Shaw, Marvin  
 1976 Group Dynamics: The Psychology of Small Group  
 Behavior. McGraw-Hill, New York.
- Shea, John (editor)  
 1880 A Description of Louisiana, Hennepin [1683].  
 University of Minnesota Press, Minneapolis reprinted  
 1938.
- 1903 Discoveries and Exploration of the Mississippi  
 Valley, with the Original Narratives of Marquette,  
 Allouez, Membre, Hennepin, and Anastase Douay [1852].  
 McDonough, New York.
- 1962 History and General Description of New France  
 [Charlevoix, 1744]. Loyola University Press, Chicago.

Skinner, Claiborne

- 1990 "They Would Not Suffer the French to Live Among Them": The Fox Wars, the Emergency of 1747, and the Origins of the Seven Years War, 1671-1752. T. Schirer (editor), Entering the 1990s, Contemporary Native American Studies. Lake Superior State University Press, Sault Ste. Marie, Michigan.

Smith, Beverley

- 1988 Faunal Remains from the Marquette Mission Site (20MK82): Selected Features from the 1985-1986 Excavations and Summary of Faunal Findings 1983-1986. Ms. on file at The Museum, Michigan State University, East Lansing.

Smith, Eric

- 1981 The Appliation of Optimal Foraging Theory to the Analysis of Hunter-Gatherer Group Size. In B. Winterhalder and E. Smith (editors), Hunter-Gatherer Foraging Strategies, pp. 36-65. University of Chicago Press, Chicago.

Smith, J.G.E.

- 1975 The Ecological Basis of Chipewyan Socioterritorial Organization. National Museums of Canada Mercury Series, Canadian Ethnology Paper 27. Ottawa.
- 1976 Local Band Organization of the Caribou-Eater Chipewyan. Arctic Anthropology 13:12-24.
- 1978 Economic Uncertainty in an "Original Affluent Society": Caribou and Caribou-Eater Adaptive Strategies. Arctic Anthropology 15:68-88.

Smith, Wallis M.

- 1970 A Re-appraisal of the Huron Kinship System. Anthropologica 12:191-1206.

Snow, Dean, and Kim Lanphear

- 1988 European Contact and Indian Depopulation in the Northeast: The Timing of the First Epidemics. Ethnohistory 35:15-33.

Spicer, Edward

- 1961 Types of Contact and Processes of Change. In Perspectives in American Indian Culture Change, E. Spicer (ed.). Chicago.

Spindler, George, and Louise Spindler

- 1971 Dreamers Without Power: The Menomini Indian. New York.

Steckley, John

1981 Untold Tales: Three Seventeenth Century Huron. R. Kerton, Ajax, Ontario.

1982 The Clans and Phratries of the Huron. Ontario Archaeologist 37:29-34.

1985 Why Did the Wenro Turn Turtle? Arch Notes 85(3):17-19.

Steward, Julian

1942 The Direct Historical Approach to Archaeology. American Antiquity 7:337-343.

Stone, Lyle

1972 Archaeological Investigations at the Marquette Mission Site, St. Ignace, Michigan, 1971: A Preliminary Report. Reports in Mackinac History and Archaeology 1. Mackinac Island State Park Commission, Lansing.

Tedeschi, James T. (editor)

1972 The Social Influence Processes. Aldine, New York.

Thomas, David H.

1971 Prehistoric Subsistence-Settlement Patterns of the Reese River Valley, Central Nevada. Ph.D. Dissertation, Department of Anthropology, University of California, Davis.

Thomas, Peter A.

1985 Cultural Change on the Southern New England Frontier, 1630-1655. In W. Fitzhugh (editor), Cultures in Contact, pp. 131-161. Smithsonian Institution, Washington, D.C.

Thwaites, Reuben Gold (editor)

1903 Hennepin: A New Discovery of a Vast Country in America (2 vols.). A.C. McClurg, Chicago.

1905 New Voyages to North America by Baron de Lahontan [1703] (2 vols.). A.C. McClurg, Chicago.

1959 The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France 1610-1791 (73 vols.). Pageant, New York.

Tilley, C.

1981 Conceptual Frameworks for the Explanation of Sociocultural Change. In Ian Hodder, G. Issac, and N. Hammond (eds.), Pattern of the Past: Studies in Honour of David Clarke. Cambridge University Press, Cambridge.

Tooker, Elisabeth

1964 An Ethnography of the Huron Indians, 1615-1649.  
Bureau of American Ethnology 190. Washington, D.C.

1978 Wyandot. In Bruce Trigger (editor), Handbook of  
North American Indians: 15 Northeast. Smithsonian  
Institution, Washington, D.C.

Townsend, Joan

1970a The Tanaina of Southwestern Alaska: An Historical  
Synopsis. The Western Canadian Journal of Anthropology  
2:2-16.

1970b Taniana Ethnohistory: An Example of a Method for  
the Study of Culture Change. In M. Lantis (editor),  
Ethnohistory in Southwestern Alaska and the Southern  
Yukon. University of Kentucky Press, Lexington.

1973 Ethnohistory in Nineteenth Century Southern and  
Western Alaska: An Interpretive Model. Ethnohistory  
20:393-412.

Trigger, Bruce

1969 The Huron: Farmers of the North. Holt, Rinehart,  
and Winston, New York.

1978 Iroquoian Matriliney. Pennsylvania Archaeologist  
48:55-65.

1984 The Road to Affluence: A Reassessment of Early Huron  
Responses to European Contact. In Richard F. Salisbury  
and Elisabeth Tooker (editors), Affluence and Cultural  
Survival. 1981 Proceedings of the American Ethnological  
Society.

1985 Natives and Newcomers: Canada's "Heroic Age"  
Reconsidered. McGill-Queen's University Press,  
Kingston.

1987 The Children of Aataentsic: A History of the Huron  
People to 1660 (2 vols). Reprint of 1976 edition.  
McGill-Queen's University Press, Montreal.

Tuckman, Bruce

1965 Developmental Sequence in Small Groups.  
Psychological Bulletin 63:384-399.

Tylor, E.B.

1871 Primitive Culture: Researches into the Development  
of Mythology, Philosophy, Religion, Language, Art and  
Custom. J. Murray, London.

- Tyyska, A.E., and W. Hurley  
 1969 Maurice Village and the Huron Bear. Paper presented at the Second Annual Meeting of the Canadian Archaeological Association.
- Upton, L.F.S.  
 1979 Micmacs and Colonists: Indian-White Relations in the Maritimes, 1713-1867. University of British Columbia Press, Vancouver.
- Vogel, Virgil  
 1987 The Blackout of Native American Cultural Achievements. American Indian Quarterly, pp. 11-35.
- Vogt, Evon Z.  
 1960 On the Concepts of Structure and Process in Cultural Anthropology. American Anthropologist 62:18-33.
- Wallerstein, Immanuel  
 1980 The Modern World-System II: Mercantilism and the Consolidation of the European World-Economy, 1660-1750. Academic Press, New York.
- Walsh, Martin  
 1982 The Condemnation of Carnival in the Jesuit Relations. Michigan Academician 84:13-26.
- Warrick, G.  
 1984 Reconstructing Ontario Iroquois Village Organization. National Museum of Man Mercury Series 124. Ottawa.
- Watson, Patty Jo, Steven LeBlanc, and Charles Redman  
 1971 Explanation in Archaeology: An Explicitly Scientific Approach. Columbia University Press, New York.
- Watt, Kenneth (editor)  
 1966 Systems Analysis in Ecology. Academic Press, New York.
- Wharton, Clifton R. Jr.  
 1971 Risk, Uncertainty, and the Subsistence Farmer: Technological Innovation and Resistance to Change in the Context of Survival. In George Dalton (editor), Studies in Economic Anthropology, pp. 152-180. American Anthropological Association, Washington, D.C.
- White, S.  
 1975 On the Origin of Gunspalls. Historical Archaeology 9:65-73.

- White, Leslie  
1959 The Evolution of Culture. McGraw-Hill, New York.
- White, Richard  
1983 The Roots of Dependency: Subsistence, Environment, and Social Change Among the Choctaws, Pawnees, and Navajos. University of Nebraska Press, Lincoln.
- Williams, Glyn  
1977 Differential Risk Strategies as Cultural Style Among Farmers in the Lower Chubut Valley, Patagonia. American Ethnologist 4:65-83.
- Williams, Sherwood, J. David Martin, and Lewis Gray  
1975 Norm Formation or Conditioning? A Study in Divergence. Small Group Behavior 6:141-150.
- Williamsen, Ronald F.  
1978 Preliminary Report on Human Interments Patterns of the Draper Site. Canadian Journal of Archaeology 2:117-121.  
  
1983 The Robin Hood Site: A Study of Functional Variability on Late Iroquoian Settlement Patterns. Monograph in Ontario Archaeology 1, Ontario Archaeological Society, Toronto.
- Wintemberg, W.J.  
1926 Foreign Aboriginal Artifacts from Post-European Iroquoian Sites in Ontario. Royal Society of Canada, Transactions 20(2):37-61.  
  
1936 Roebuck Prehistoric Village Site,. Greenville Co., Ontario. National Museum of Man Bulletin 83. Ottawa.  
  
1946 The Sidey-Mackay Village Site. American Antiquity 11:154-182.
- Winterhalder, Bruce  
1981 Optimal Foraging Strategies and Hunter-Gatherer Research in Anthropology: Theory and Models. In B. Winterhalder and E. Smith (editors), Hunter-Gatherer Foraging Strategies, pp. 13-35. University of Chicago Press, Chicago.
- Winterhalder, Bruce, and Eric Smith (editors)  
1981 Hunter-Gather Foraging Strategies: Ethnographic and Archaeological Analyses. The University of Chicago Press, Chicago.
- Witthoft, John  
1966 Archaeology as a Key to the Colonial Fur Trade. Minnesota History 40:203-209.



- Woods, Clyde  
1975 Culture Change. Wm. C. Brown, Iowa.
- Wright, J.V.  
1963 An Archaeological Survey Along the North Shore of Lake Superior. National Museum of Canada Anthropology Papers 3.  
  
1965 A Regional Examination of Ojibwa Culture History. Anthropologica 7:189-227.  
  
1966 The Ontario Iroquois Tradition. National Museum of Man 210.  
  
1974 The Nodwell Site. National Museum of Man Mercury Series 22. Ottawa.
- Wright, Milton  
1981 The Walker Site. National Museum of Man Mercury Series 103. Ottawa.
- Wrong, George (editor)  
1939 Father Gabriel Sagard: The Long Journey to the Country of the Hurons (1632). The Champlain Society, Toronto.
- Yerbury, J.C.  
1986 The Subarctic Indians and the Fur Trade, 1680-1860. University of British Columbia Press, Vancouver.
- Zaleznik, Abraham, and David Moment  
1964 The Dynamics of Interpersonal Behavior. Wiley, New York.



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