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## Style, Ethnicity, Technology, and Practice: Analysis of a Material Culture Assemblage from the Paleoindian-Archaic Cultural Transition in the Northwestern Great Lakes

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**STYLE, ETHNICITY, TECHNOLOGY, AND PRACTICE: ANALYSIS OF A  
MATERIAL CULTURE ASSEMBLAGE FROM THE PALEOINDIAN-ARCHAIC  
CULTURAL TRANSITION IN THE NORTHWESTERN GREAT LAKES**

by

**Matthew R. Laidler**

**A Thesis  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment of the  
requirements for the  
Degree of Master of Arts  
Department of Anthropology**

**Western Michigan University  
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Matthew R. Laidler

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Western Michigan University, 2003

This study examines issues concerning the theoretical basis of style and ethnicity in archaeology through analysis of a material culture (lithic) assemblage from the Late Paleoindian-Archaic cultural transition period in the Northwestern Great Lakes region of the United States. A theoretical framework utilizing practice theory as expounded by Pierre Bourdieu is applied to an interpretation of both the theoretical and concrete issues involved in this analysis. Using the context of an interpreted ritual/mortuary site, a social archaeology concerned with the social, political, and organizational context of production, use, and deposition of technological objects is developed to address style and ethnicity within a practice theory framework. Rather than focus on the physical environment through a systemic approach to the context of cultural reproduction/social change, an agent-centered approach is attempted, which re-focuses analysis of material culture on the social contexts of style, ethnicity, and technology (material culture).

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# CHAPTER I

## INTRODUCTION

Archaeology is invariably a field of discourse focused on interpreting the context of past societies through their material remains. This process of discourse unfolds through an analysis and interpretation of a material record that we as the field's practitioners, hope reveals traces of this context. Often, elements of material variation are interpreted, or inferred, to be referents of functional or stylistic difference, or markers of ethnic affinity. These assumptions form both the basis of archaeological analysis and interpretation. It is primarily the concepts of style and ethnicity, through the technology of material culture, that this thesis focuses upon. I have chosen to address two basic theoretical concepts in the context of a particular archaeological record—or rather, the context of a particular archaeological assemblage. These concepts are “style” and “ethnicity” and I investigate them through the context of a Paleoindian-Archaic cultural transition site in the Northwestern Great Lakes.

In 1987, an early Native American archaeological site was discovered on the shores of Deer Lake in the Upper Peninsula of Michigan (Buckmaster and Paquette 1988). An assemblage of lithic tools was found deposited in a manner that has been interpreted as a mortuary or ritual context (Buckmaster and Paquette 1988). The site is known as the Gorto site (20 MQ 39) and it is this assemblage of lithic tools that I attempt to describe and analyze within this thesis. The bifacial tools that were recovered from the site are somewhat unique in that they seem to combine stylistic attributes from both the Paleoindian and Archaic time periods. In the original report

(Buckmaster and Paquette 1988), the points were classified by a standard typology (as "side-notched" and "Scottsbluff"), pointing to the differences in these technologies. Often, these types of technological differences are sufficient to draw cultural distinctions such as "Phase" and "Complex" around assemblages, indicating some degree of ethnic differentiation. However, the tools from the Gorto site were found at the same site within a single non-stratified feature. This indicates that the makers of the Archaic and Late Paleoindian tools of the Gorto site were contemporaries.

There are several important questions that I bring forth in this text. The primary concern is why this particular assemblage is so heterogeneous, mixing as it were, stylistic elements from both "Archaic" and "Late Paleoindian" tool traditions, in varying degrees. What, in effect, does this indicate? Did it result from functional requirements? Did it result from an "interaction" of different ethnic groups? Did it result from some form of political necessity, such as a symbolic "signaling" to social others? Whatever the reasons for this degree of variation within the Gorto assemblage, it is not what is expected for a time period in which assemblages generally exhibit greater homogeneity. Therefore, the central question of this thesis is: why does this "stylistic" diversity occur in the Gorto site assemblage, and what *social* factors may have contributed to this material outcome? Upon first inspection, I attributed the "typological" differences in the Gorto assemblage to differences in ethnic affinity, a view that I now question, within this study.

The use of style and ethnicity as archaeological concepts are central to this thesis. I therefore begin with an examination of uses and limitations of archaeological conceptualizations of these factors, as well as their practical and

theoretical advantages and shortcomings. Theory structures the details of archaeological interpretation. Therefore, I rely heavily on a theoretical framework for interpreting this record. I have utilized elements of “practice” theory as outlined by Pierre Bourdieu (Bourdieu 1977, 1990). Principally, the concept of *habitus* has been central to this effort. *Habitus* has been defined as

systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them (Bourdieu 1990: 53)

Practice theory allows an archaeologist to define the intersection between style, ethnicity, and technology by providing a platform from which an interpretation can emerge that mediates the discursive social relationship between these factors. This platform is the epistemology of the theory itself, which allows an archaeological culture to be viewed quite differently from that of an entity with ethnicity, style, technology and history added on in a functional, mechanical, or epiphenominal way. Through a brief outline of past and recent theories on style and ethnicity, I attempt to demonstrate how archaeological cultures have been described in this way. Through *habitus*, an archaeological culture becomes an intersection of social identity and the material products that arise from processes involved in its being. It is, in essence, a text in the process of formation, both in the archaeological past and the interpretive present.

Chapter 2 outlines some of the theoretical considerations involved in this text,

both in terms of the concepts of style and ethnicity. I then explore concepts relating to social organization, since this is an important consideration when interpreting a context, or inferring it, from the archaeological record. Chapter 3 details some of the history of the Paleoindian-Archaic cultural “boundary” in order to temporally define the context of the Gorto site. I use ethnographic analogy in chapter 4 to suggest a connection between what I perceive as the record, and the type of social and political organization potentially involved in the dynamic of material production responsible for the Gorto assemblage. This involves a somewhat atypical supposition in the world of Great Lakes Paleoindian-Archaic archaeology: that these people were not caribou-reliant specialized hunters and gatherers, but generalist foragers living in an environment that was not entirely different from what appears today in the same region. The people I introduce as analogues to the Paleoindian-Archaic record in the Northwest Great Lakes are the Innu—a group of Sub-Arctic hunter-gatherers. It is primarily the form of social organization of these people which attracted me to using them as a referent, or analogue, to the record. The Innu are known, among Sub-Arctic peoples, to have had a particularly flexible (if not fluid) social structure, which I believe is necessary to apply to Paleoindian and Archaic peoples in the Northwestern Great Lakes because of the purportedly low population in the area, the marginality of their environment, and the proposed egalitarian nature of their societies.

In chapters 5 through 7, I approach the material aspects of the Gorto site and assemblage by introducing a fairly recently defined method of lithic analysis—the *chaîne opératoire* technique, which in its whole, views tools and tool assemblages within a cyclical perspective; that is, how an object is made and deposited from raw

material acquisition to deposition of the exhausted object. I take a somewhat different slant on this approach, and apply it strictly to the operational chain that was used to produce the final touches on a finished object. I argue that this is more important than examining the linear dimensions of an object (width, length, stem width, etc.), because I believe these types of attributes are neither emically meaningful, nor very useful in determining the level of variation that exists in tool assemblages.

Lastly, in chapter 8, I summarize the archaeological context of the tools I am describing through conclusions made about the particular subjects I approach—style, ethnicity, technology, and practice. I have aimed to tie them together “holistically” for a social explanation of the material culture variation I have described. Aspects of practice theory are again prominent in this effort.

Ultimately, I am not arguing that social organization, social structure, style, or ethnicity should be garnered from the archaeological record in any particular, new, or novel way, nor am I looking for these things to emerge definitively from the record. However, I do use these platforms to argue that the way cultural objects are constructed is a dialectical process, based in social relations, negotiations, traditions, and durable dispositions (Bourdieu 1977, 1990) that in part create the objects, and are in turn, created by them. Technology and material culture are an integral part of social reproduction. Herein lies the crux of my argument, that *habitus*—“durable dispositions,” can serve as a framework for “thinking through” style, ethnicity, and technology, their place in archaeological interpretation, and ultimately, in clarifying the social role and reproduction of the objects that purportedly embody these concepts.

Steps toward any form of a social history for the Late Paleoindian-Archaic time period in the Great Lakes region have not been fully initiated partly as a result of the epistemological limitations of preceding theoretical currents, mainly by which I mean the ecosystemic approach associated with Processualism in which environmental factors supersede social factors in explicative power (Brumfiel 1992). The same could be maintained for functional explanations in terms of technological aspects of the material record. While the potential for environmental change to serve as a motivator of social change should not be ignored, it is not the focus of this study. Rather, I intend to investigate the social and political factors that could potentially account for aspects of cultural practice evident in the record.

I have attempted to conduct this study in terms of a hermeneutic framework, by which the methodology I have developed and utilized is mainly informed by the theoretical stance I have adopted (Shanks and Tilley 1987a, 1987b). It is for this reason that theory precedes methodology in the textual construction of this thesis. Also, it is hoped that this methodology can introduce aspects of the agents that are responsible for the production of material culture in the analysis and interpretation; that is, by re-focusing on the subject of analysis—the historical agent—in the assessment of material culture assemblages, an *agent*-centered and historical account can emerge (Dobres and Hoffman 1994; Dobres and Robb 2000a, 2000b) rather than a functional and system-centered interpretation. By framing these interpretations *vis á vis* the social context of style and ethnicity, instead of an instrumental approach to these subjects, I have likewise determined a focus on the social aspects of technology and social practice.

There are several reasons why I believe that investigating a

Paleoindian-Archaic archaeological context in the manner I have chosen is important. Firstly, and as mentioned, the use of practice theory allows for a more phenomenological approach to the archaeological record whereby historical agents actively negotiate the production and reproduction of culture (and therefore material culture as well). This effectively limits, yet does not eliminate, any functional requirements of style and ethnicity in the cultural sphere. Secondly, the use of practice theory in interpreting style, ethnicity, and even technology, provides an alternative to theories based on the ecosystemic approach, yet remains somewhat undeveloped in archaeology. Thirdly, the Paleoindian-Archaic archaeological context I utilize is rarely the subject of epistemological inquiry. That is, while the scant material record provides impoverished information regarding the daily lives of an Early Holocene people, it does present an opportunity to explore what “style” and “ethnicity” mean in the absence of a more definitive context with an expansive material culture inventory. And while this may seem rather difficult, if not implausible, the Paleoindian-Archaic record of the Great Lakes region provides little else than remnants of material culture variation in the form of lithic tools. In other words, the context of Late Paleoindian societies: small groups living in marginal environments, potentially fluid political and social boundaries, and a relatively limited material culture inventory, provide an interesting opportunity to investigate how these groups may have negotiated social identity through material culture, and material culture through social identity.

In conclusion, I begin this investigation by questioning the potential social processes that produced the level of variation apparent in the lithic bifacial tool assemblage of the Gorto site. In order to investigate the origins of material culture

variation, I must question the theoretical basis for the concepts of “style” and “ethnicity” in archaeology, since these are the foundations of demarcating and interpreting variation in the material record. Through questioning these foundations, I suggest the advantages and disadvantages of past approaches. The use of practice theory as explicated by Bourdieu becomes the new framework through which “style” and “ethnicity” (and as a result, technology) are interpreted. Technology, as an outcome in the process of social reproduction, is analyzed through aspects of the *chaîne opératoire* technique. As a result, the conclusion reached is that style, ethnicity, technology, and social practices are intertwined in the dialectic of social identity, and the production of a social *habitus*. Material culture is a manifestation of this process. The use of a lithic tool assemblage as the social objects of analysis is especially useful, since stone tools leave tangible and enduring traces of their production trajectories (a point I return to below), and with them, traces of social production and reproduction processes.



## CHAPTER II

### STYLE, ETHNICITY, AND MATERIAL CULTURE: ARCHAEOLOGICAL APPROACHES

Archaeology, as a field of discourse on the histories of past societies, is inexorably engaged in the interpretation of the only remaining vestiges of those societies—material culture. Understanding the contextual meaning and uses of material objects in order to disclose or decode information about the social agents and social relations in question is a central theme of archaeological inquiry and explanation (Dobres and Hoffman 1999; Nassaney 2000). However, the variation in form of material objects—the heuristic, or subject, termed “style”—has historically challenged practitioners of the discipline in terms of interpretive quality; that is, the meaning of formal variation in material assemblages is not readily apparent for decoding or interpretation, unless the specific social context in which this variation arose can be understood and explained (Hodder 1982, 1992). The means by which this context has traditionally and repetitively been explicated is primarily in demarcating between cultural entities in accord with differences in material assemblages, both functional and stylistic. Within the broadest scalar level of inquiry and classification, cultural difference is apparently the most facile aspect of the archaeological record to examine, describe, or explain; that is, ethnicity seems apparent by material difference alone (Jones 1997). However, neither style as subject, nor ethnicity as cultural difference, is unproblematic in terms of heuristic uses, definition, or theoretical rigor. The importance of investigating the archaeological uses of these concepts is multidimensional, yet partially lies in the

recent theoretical shift from interpretations based on ecosystemic approaches (Brumfiel 1992), to the articulation of social explanations of cultural change based on agent-centered approaches (Dobres and Robb 2000a). The following section is not intended as an all-inclusive history of approaches to style and ethnicity, but rather, as a partial survey and inquiry into the epistemological limitations of select approaches on style in order to frame the problem anew within this particular study.

### Archaeology and Style: Perspectives on Material Culture Variation

The challenges involved in utilizing the concepts of style and ethnicity in archaeology have not gone unnoticed, as various theoretical stances have arisen over the previous decades to confront the shortcomings of preceding paradigmatic epistemologies, the conclusions of which have generally been subjected to the limitations of the initial assumptions. The principal question involved in interpreting social information from stylistic variation is the role this form of variation plays in societies, and how it is manifest in material form. It is the material manifestation of culturally constructed objects that have been utilized historically to address questions of ethnic differentiation or affinity. The professionalization of archaeology is just so situated within this particular form of inquiry and methodology, arising within the Culture-History school (Trigger 1989). Therefore, in order to frame the contemporary context of the uses of style and ethnicity as subjects of archaeological inquiry, the theoretical background of these ideas must be framed within the historical context of the theoretical currents from which they arose. Therefore, the following is an overview of how style has been viewed by archaeologists.

Style, as a means of description and classification was conceptually solidified under the Culture-History approach to situate the ethnogenesis and historical progression of extant geopolitical groups in Europe (Arnold 1990). Perhaps the most widely recognized approach to formal variation in the Culture-History school was the *Kulturkreis* concept formulated by Gustaf Kossina (Arnold 1990; Trigger 1989: 165). This approach was adopted in the U.S. to primarily build cultural chronologies of extinct native groups—ethnicities—within delimited regions. The central methodological device used in stylistic analysis to demarcate ethnic territories in the Culture-History paradigm was the “type,” shown by many practitioners to be useful in classifying the vast material assemblages of archaeological cultures (Trigger 1989: 200-204). In this context, style was only a weakly developed concept, omitting even functional explanation in place of constructing an elaborate taxonomic system for the purposes of delineating ethnic groups in the archaeological record.

Originating primarily with Franz Boas, the “trait list” concept was eventually established (Trigger 1989: 190), basing ethnic affinity on the presence or absence of various material objects, refined to include elements of stylistic variation—such as decoration. The results, normative and hence, inferentially rigid, were schemas of group affinity based on perceivable variation in the material record. Conclusively, the use of style, undeveloped and functioning as a means to loosely developed methodological ends—defining ethnic differentiation—was never based on potential emic function, meaning, or context within the Culture-History school. Primarily, style, as an emically unimportant expression, was perceived to be disseminated through cultural entities by either diffusion or migration, limiting the potential of social agents to initiate culture change, passively and normatively accepting under a Western

rational model of social epistemology (Thomas 1996), the cultural items of other groups. While this was certainly not the case in the lived experience of historical agents responsible for the archaeological record, the assumptions operating under the Culture-History paradigm led inexorably to the interpretive limitations therein.

Dissatisfaction with the normative approach to archaeological inquiry and explanation in part led to the rise of Processualism in the 1960s (Dunnell 1980; Trigger 1989). Although expanding on the preceding view of formal variation, the “New” archaeology adopted the general systems approach to culture and culture change, promising the decoding of previously unattainable information about aspects of archaeological cultures; social organization and ideology now seemed as accessible as technology in making archaeological inferences. In all, advocates of the New Archaeology clearly recognized that variation in material assemblages went beyond the former normative parameters and assumptions. As typologies were expanded, taxonomic systems aimed at objective recognition of variation were established for many regions of North America. However, style was ultimately viewed as epiphenominal in the New Archaeology—something “added-on”; that is, formal variation that remained unexplained by function was viewed primarily as decorative effect, thus relegating style to an unimportant role in explaining change or meaning in cultural systems. The Processual view on style as essentially extraneous is concisely summarized by Whallon (1968: 224)

...if these attributes then exhibit systematic patterns of behavior which can be related to the influence of social, cultural, or individual factors, rather than to factors of function or of the physical environment, both the attributes and their behavior are considered stylistic

Herein originated the foundations of Processual assumptions about style. In conclusion, style, as defined and utilized within the Processual school of thought, has no essential function; although the New Archaeology seemed to promise the opening of the “black boxes” of social information (Binford 1965), reliance on a systems approach inevitably limited the interpretive potential of the method. The emphasis upon the adaptation, survival, and perpetuation of the *system*, instead of the *agents* that constituted the system, led to a restricted use of style in interpretation, as well as a limited means of defining the concept. The subject and objects of style were invariably relegated to insignificant, ephemeral, and decorative qualities.

However, as Whallon (1968) contended, beyond the former speculations about the spread of stylistic elements between cultural groups, there was more involved than simple diffusion and migration. The New Archaeology essentially viewed the dissemination of technological advances—and often with them, stylistic attributes—as a function of the interaction between groups, as well as relating to adaptive significance. Much like Binford (1971) asserted in analyzing mortuary practice, a one to one correlation between practice and material record was often assumed and expected. Although the Processual approach limited the interpretive potential of archaeological data, subsequent approaches, influenced by other historical factors in constructing a body of theory concerning style continue the debate surrounding the definition and function of this subject.

An effective challenge to the Processual stance on style came from Wobst's (1977) seminal work on the subject. In terms of Wobst's approach, style has function: that of communication. Diverging from the ceramic sociology studies of the 1960s (Deetz 1967), Wobst maintained that specific messages encoded in material

objects could inform the archaeologist about more than just social organization or kinship structures. These specific messages relay information to targeted groups—those with adequate knowledge of their symbolic significance. The information exchange approach redirected the research focus on style away from viewing the subject as a passive phenomenon (Hegmon 1993)—the aspects of formal variation not constrained by technological factors. As an economic and functional argument (Hegmon 1998), Wobst's case for stylistic messaging relies on the assumption that cost effectiveness leads to stylistic homogeneity and standardization of messages, relegating this approach's conclusions to functional ends. Logically, individuals who are in constant interaction have no need to constantly emit redundant messages, so it is the highly visible cultural objects that are best suited to broadcast messages to those at a distance—those who may not be acquainted with the emitter, yet understand the emission. Wobst also maintained that the majority of messages would be those that relay information concerning social integration or distinction, functioning essentially as ethnic markers. Concomitantly, it would be such messages that are most widely transmitted and cost-effective.

The information exchange model was further carried forth by Wiessner (1983), who qualified Wobst's argument with few alterations. In short, Wiessner made the distinction between cultural objects and object attributes that directly represent group affiliation—*emblemic* style—and those that represent individual idiosyncrasies in technological or decorative choice—*assertive* style. Wiessner (1990) has also made the case that style may be best understood contextually, a view echoed by Hodder (1990) who has asserted that style is an historical quality

that must be addressed in accord with the individual social histories that brought divergent contexts into existence. This view seems to have been adopted by others (Conkey 1990; Hegmon 1993; Wiessner 1990) who view style as a contextual subject in which no single approach may be ideal under all circumstances. While these more or less subjective views on the subject of style emphasize the contextuality as well as the communicative function of variation in material culture, they are as often diverse in practice and conclusion as the archaeological cultures under investigation. This partially stems from the problem of defining style. As some researchers contend, archaeologists are often in agreement about what they are referring to when they discuss style (Hegmon 1993), if not by definition, then by recognition. This has not, however, prevented some researchers from attempting to develop a unified theory of style (Carr and Neitzel 1995), in which the subject can be defined operationally and approached in the same way for all contexts. Although it is questionable whether a unified theory of style is necessary in archaeology (Conkey 1990), it does draw some attention to the dispersed approaches being utilized in research, as well as the apparent schism between objective/processual and subjective/contextual approaches.

Another aspect of the theoretical fallout between Processual and Post-Processual paradigms is in the utilization of style as either an active or passive phenomenon. As previously discussed, the view in the New Archaeology is of style as an “added-on” component—a view that is carried over into subsequent theoretical currents. Contra, the view informed by the information exchange model tends toward conceptualizing style as a phenomenon that is actively created, albeit functional in final outcome. A synthesis of these disparate views would lead to an

approach that can transcend the objective/subjective:passive/active dichotomies using aspects and concerns of many current approaches to build an interpretive framework useful for various archaeological contexts. Such an approach would require interpretive flexibility to fit the differing conditions of those contexts. I will return to this point in the section below.

It is clear that current approaches to the subject of style are doubtlessly based on the recognition of the theoretical limitations of preceding paradigms. While the development of a new theoretical approach is by no means proposed here, what is recognized is that framing questions on style must be geared toward answering particulars about social dynamics in order to understand the social context in which aspects of style arise. An approach that focuses on the social agents responsible for the creation of material culture, rather than systems and functional ends and goals, seems apt to answer social questions about the archaeological record in regard to style.

#### Archaeology and Ethnicity: Social Difference, Content, and the Material Record

Aforementioned was the point that the seemingly most accessible information to the archaeological researcher is that of social distinctiveness—or, because of its scalar breadth, clear “ethnic” differences represented in the archaeological record by material differences between (or sometimes within) assemblages. While this is not always (nor clearly) the case, the entire discipline was in part founded upon this very idea. Unlike other factors of social division and identity that often need to be inferred from the record (such as gender, class, race, etc.), ethnicity would seem apparent by



recognition of overall material difference alone. Evidently, this very approach has maintained its explanatory power through numerous paradigmatic shifts as a result of the ease in assigning material differences across regions to differences attributable to ethnicity. Likewise, the lack of differences in material culture has historically been taken to indicate a lack of difference in ethnic affiliation.

The emphasis on social difference defining ethnicity is not exclusive to archaeology alone, for its roots lie in the field of cultural anthropology. This approach gained favor in the 1970s, following the very influential work of Fredrik Barth, whose 1969 text, *Ethnic Groups and Boundaries*, has greatly influenced archaeological interpretations into the present. Barth effectively deconstructed the objective approach to defining ethnic groups as observable social facts in favor of a relativist treatment of the subject. Contending that ethnicity is a social construct, variously defined emically and etically by socially positioned individuals on either side of the observer's line, Barth made one point clear: that ethnicity is primarily the result of structural positions which underscore social difference. Focusing on the rules of social behavior, Barth's structural analysis underemphasized the content of social difference (Erikson 1991; Hegmon 1998), asserting that social difference in content results from social difference in structure. Archaeologists were of course attracted to this approach, implying as it did that patterned variation in the archaeological record would reveal the basis of structure—the rules of behavior—and hence, of ethnic affinity.

In the wake of Barth's work, the Primordialist versus Instrumentalist debates (Jones 1997) were set off, the former emphasizing outward appearances (such as clothing) or language (Hegmon 1998) as the basis for ethnic difference; the later

maintaining that various and differential political or economic strategies were responsible. In both cases, structural analysis led to an overemphasis on the rules and norms that structure social relations, mainly ignoring the forms of intersubjective meaning created by social actors which give emergence to structure (Erikson 1991). In all, structure—the underlying rules, norms, and patterns of society that influence individual human action—can only be understood in relation to content (Erikson 1991), as social actors contest and negotiate where the differences between them really are, building the basis of meaning and content on an inter-agent basis through lived experience (Pfaffenberger 1999).

The role of the social actor, and hence, agency—intersubjective engagement with the social and material world (Thomas 1996)—must be fully acknowledged in analyzing ethnicity if structure is to be understood. Reasonably, an approach that takes into account both structure and agency in interpreting social action would be appropriate in viewing ethnicity and style in the archaeological record, since some aspects of both factors are visible, as well as lacking, in this record. Recently, some researchers have turned to practice theory (Bourdieu 1977, 1990; Giddens 1979; Dobres and Robb 2000b; Dietler & Herbich 1998) in order to interpret both ethnographic and archaeological data. Practice theory, in the tradition of Bourdieu (1977, 1990), provides a bridge between objective and subjective approaches to both style and ethnicity and allows a recursive relationship between agency and structure. In Bourdieu's words (1999: 54)

Objectivism constitutes the social world as a spectacle offered to an observer who takes up a 'point of view' on the action and who, putting into the object the principles of his relation to the object, proceeds as

if it were intended solely for knowledge and as if all the interactions within it were purely symbolic exchanges...one has to situate oneself *within* 'real activity as such', that is, in the practical relation to the world...one has to escape from the realism of the structure, to which objectivism, a necessary stage in breaking with primary experience and constructing the objective relationships, necessarily leads when it hypostatizes these relations by treating them as realities already constituted outside of the history of the group—without falling back into subjectivism, which is quite incapable of giving an account of the necessity of the social world

### Style, Ethnicity, and Practice

Bourdieu's (1977, 1990) conceptualization of practice is exemplified by the concept of *habitus*: the various "dispositions" social actors live by and in accord with, or the tendencies toward certain actions that have been developed structurally through lived experience. As certain actions and reactions are perceived as being "natural" by other social actors, validating while creating the rules and norms of behavior, structure is created and maintained through a dialectical relationship between those rules, and action. On the individual level, as one navigates the social rules of society in accord with her/his own sense of *habitus*, new experiences are processed cognitively, in relation to prior structures produced or encountered in the past. Navigating lived experience through a bricolage of interchangeable reactions to varying contexts, an individual, and the *habitus* are informed and altered by those

varying contexts differentially, without ever necessarily learning in full, the particular rules involved. As Bourdieu states (1977: 77):

The practical evaluation of the likelihood of the success of a given action in a given situation brings into play a whole body of wisdoms, sayings, commonplaces, ethical precepts ("that's not for the likes of us") and, at a deeper level, the unconscious principles of the *ethos* which, being the product of a learning process dominated by a determinate type of objective regularities, determines 'reasonable' and 'unreasonable' conduct for every agent subjected to those regularities.

*Habitus* would appear to be a deeply ingrained tendency toward conservative behavior, but within the logic of practice, this is only a partial truth. In fact, many theoretical views in archaeology emphasized agents as "...omniscient, practical, and free-willed" (Dobres and Robb 2000a: 4) or occupying an idealized Western social epistemology (Thomas 1996), instead of being "...socially embedded, imperfect, and often impractical people" (Dobres and Robb 2000a: 4).

Practice theory is perhaps best understood within the process of structuration (Giddens 1984)—the recursive relationship between agency and structure in which individual action, enacted within structure, creates the conditions for future actions and structure; it is, as Bourdieu (1990: 53) states, "a structuring structure." Material culture, of course, results from human meaning and action (Hodder 1982, 1992), enacted within positionally perceived structure; that is, by individuals who occupy a *multitude of intersecting social positions and identities*.

However enacted by agents, the material world, much like the social, wears a veil of "naturalness," or *doxa*, wherein the social order and the material objects used

to reproduce it seem natural and inevitable (Bourdieu 1977, 1990). This is partly what Hegmon (1993) refers to in defining style as a “way of doing.” Viewing style as a “way of doing”—free action in the world—seems wholly inadequate however, as stylistic variation surely results from *contextualized* action, whereas the agent acts to create, reproduce, or negotiate the social order through material culture.

Approaches that focus solely on functional or structural explanations to style leave out the agency of the individual to manipulate the material world in contesting, qualifying, or legitimating the social order, and hence, misplace explanation of both variation and homogeneity in stylistic aspects of material culture.

Likewise, a practice approach to ethnicity acknowledges the experience of the individual, and her/his potential to alter history, albeit, perhaps not exactly as intended (McGuire 1992, after Marx). As Jones (1997: 126) so eloquently states, ethnicity “is a product of the intersection of similarities and differences in people’s *habitus* and the conditions characterizing any given historical situation.” Essentially, various aspects of what social agents perceive to be ethnic similarity or difference are called into play, perhaps even discordantly or contradictory to past circumstances, depending on the given social situation. It is not enough to state that ethnicity is multifaceted or multidimensional, maintaining the potential for a purely objective framework of understanding or explication, as the very lived experiences of differentially positioned individuals calls disparate aspects of ethnicity into action within varying social contexts. This is what makes an understanding of context crucial for interpreting the potential aspects of ethnicity being expressed in the material record.

## Style, Ethnicity, and Social Context

Certain social situations may intensify, or exaggerate, contexts of difference. In terms of ritual activity, social rules may be underscored, or social contradictions emphasized (Turner 1967; Nassaney 1989; Ortnier 1978). This may result from the fact that ritual seems to accentuate the objectification of social practice, which is imperative to the reproduction of the social and political order (Handler 1988). It has been suggested that even gender roles are perhaps exaggerated or especially articulated in ritual context (Conkey 1991).

The case study that I present here is perhaps a context that includes some of these aforementioned elements—ritual space as social (and archaeological) context, potential for cultural objectification, social interaction between “ethnic” groups, and social reproduction through assessment of the political order—where the social event(s) that occurred in the physical spaces of action were temporally short-lived, yet represent a rich body of symbolic, ideological, political, and social information. The Gorto site (20 MQ 39), which is introduced below, is a Paleoindian-Archaic period transition site with inferred ritual activity—and perhaps this form of social activity alone—that may potentially lend insight into the multidimensional and intersecting social nature of style, ethnicity, technology, and practice in a period of interpreted social and ecological transition, through an analysis of its material remains.

## CHAPTER III

LATE PALEOINDIAN-ARCHAIC MANIFESTATIONS IN THE WEST, MIDWEST,  
AND NORTHWESTERN GREAT LAKES

In order to provide a sociohistorical context for this case study, I present a brief outline of the culture-history in the generalized "Midwest" and Northwestern Great Lakes region (see Figure 1) during the Late Paleoindian time period and extending into the Early Archaic time period. The manner in which Late Paleoindian cultural history has been typically recounted for this area (Upper Midwest and Great Lakes region) is in accord with what is known from western sites, generally west of the Mississippi River (Fitting 1970, Mason 1981). This time period in the Great Lakes region has been referred to as an interregnum (Mason 1981)—or a gradual cultural transformation from the lifeways known as Paleoindian, to those that would come in succession. Because there is little more than an arbitrary dividing line in the chronology for the area in which the two generalized lifeways can be viewed, it may be best to refer to this time period as the "Interregnum" (although I will use this term interchangeably with the terms Paleoindian-Archaic, and Late Paleoindian-(Early) Archaic transitional period). Generally, the Paleoindian time period is not clearly demarcated from the Archaic outside of an arbitrary date (10,000 B.P. according to Justice [1987]) and differences in tool forms (predominantly lanceolate projectile points from the Paleoindian tool traditions, and notched projectile points from the Archaic tool traditions). However, this is little more than a convenient way to divide and categorize what is becoming a seemingly more complex temporal and cultural record. In the Northwestern Great Lakes area, the temporal sequence is perhaps

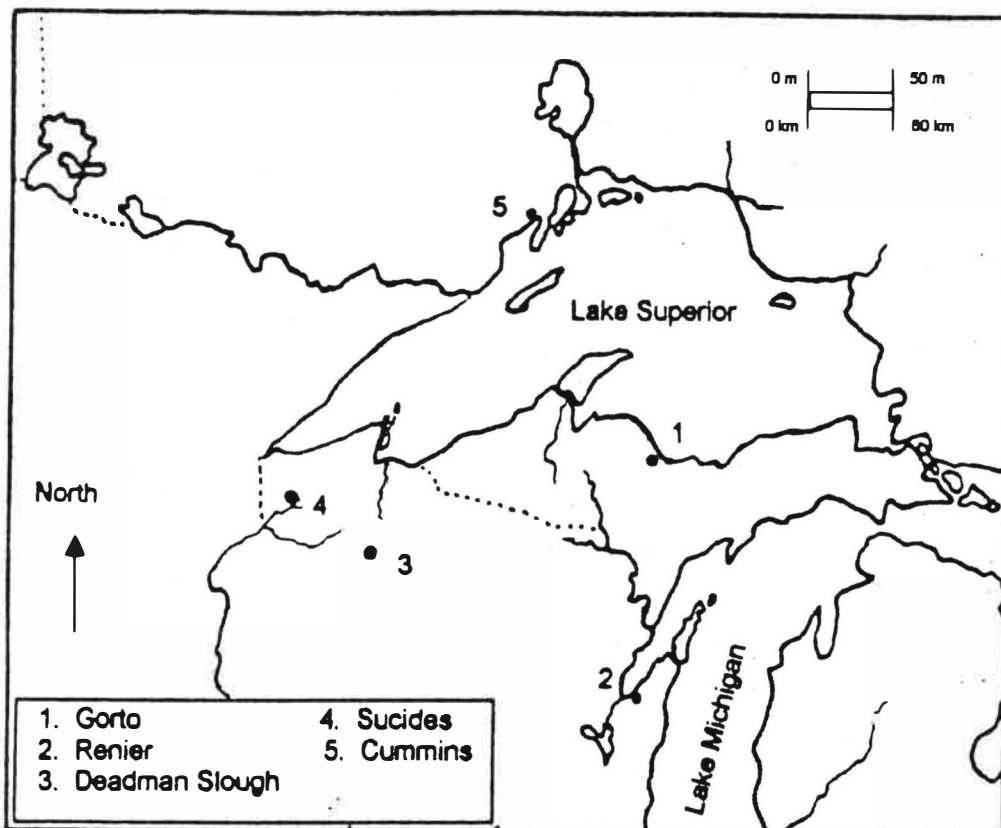


Figure 1. Northwestern Great Lakes Region, Showing Significant Late Paleoindian-Archaic Sites.

more complicated, as peoples associated with the Paleoindian and Archaic cultural traditions seem to overlap in the chronology, glaciation lasted longer than in other areas of the Midwest, and human movement into the area was likely inhibited and delayed by late glacial activity. The result is that the Paleoindian time period, at least in terms of tool traditions, seems to survive somewhat longer in this region compared to adjacent areas.

Clearly, within the Great Lakes Interregnum, changes in the physical environment, human technology, subsistence, and social organization were all taking



place, as was the case throughout much of North America (although temporally varying between regions) as the material record points to a widespread shift in native people's lifeways during this time of transition into the Holocene. In the Upper and Northwestern Great Lakes, glacial activity had generally subsided 10,000 years ago. The landscape by 9,000 years ago had started to resemble that which had been encountered during the period of contact with Europeans, at least in terms of vegetation communities (Kuehn 1999). Although the environment at this time in the Northwestern Great Lakes was fairly stable, the social environment may have begun changing substantially. The archaeological record begins to show a diversity of tool types where before there was little variation. This may indicate a florescence of material culture traditions, or even a movement of different groups into the area. Some, perhaps migrating from the west as the climatic episode known as the Altithermal—known for hot, dry conditions across the continent—began, although the movement of human populations within and through the region is no doubt far more complex than this generalized scenario.

Based on interpreted material remains from numerous sites extending geographically from Michigan to Manitoba, researchers have recognized several cultural "complexes" and "phases" dating to the interregnum (Julig 1994; Harrison 1995; Peppitas 1976; Peppitas and Buchner 1983; Ross 1995; Salzer 1974; Steinbring 1974; Steinbring and Buchner 1980; Wheeler 1978). "Complex" is often a very general term used to denote a series of similar tool types associated with a particular excavation (Justice 1987). A "phase" pertains to a more clearly defined material culture tradition, identifiable by "unique artifact traits as well as geographic and often temporal restriction within the known area and time range of the tradition"

(Justice 1987: 11). The material record for Northwestern Great Lakes Interregnum is somewhat sparse, resulting in some ambiguity as to what constitutes a phase or an archaeological complex in this area, and the validity of this designation.

Materially attributable to the amorphous technological tradition known as Plano, the Michigan to Manitoba Late Paleoindian cultural complexes are generally inadequately dated, if at all, yet likely overlapped temporally, geographically, and socially. Of course, all these so-called complexes and phases have parallels—if not outright connections of technological traditions—in western sites, where the bulk of these tool traditions were originally identified by archaeologists. While the connection to western groups is obvious in terms of material similarities, the nature of the social relationship between regions is not entirely clear.

#### Paleoindian-Archaic Interregnum Groups in the Southwestern Great Lakes Region

The Southwestern Great Lakes region, as well as surrounding areas, had also begun to experience many changes in both human and environmental dynamics during the interregnum period (Brown and Vierra 1983), as the climate warmed, making way for the gradual northward migration of floral and faunal communities (Behm 1985). Human communities no doubt followed suit, pursuing climatic zones slowly as they advanced north. This was perhaps the setting for cultural change as it existed across the region: human population movement in correlation with the continuing environmental changes. The main point of interest is speculation on how these human communities reacted socially to the changes. Between 9200 and 8600 B.P., the Hardin Phase existed in the region just south of the Northwestern Great

Lakes area (Behm 1985) and included much of the region typically termed the “Midwest.” The northern geographic extent of this culture was the Fox River in Wisconsin (Behm 1985), while north of this point, Paleoindian lifeways may have continued. The typical material object associated with the Hardin Barb tradition is the Hardin Barb point, which is quite similar to the so-called Scottsbluff point, except for the lack of transverse parallel flaking seen in the Scottsbluff variety (Justice 1987). Other subtle differences also apparently separate the two tool forms (Behm 1985).

Other projectile tool forms, which have been interpreted to represent distinct cultures, overlap both geographically and temporally over much of the Midwest. The Thebes Cluster (Justice 1987), as well as large side-notched projectile points are also ubiquitous in the Midwest. Both varieties overlap temporally and fall within the time frame the Hardin Phase. The overall picture of what has been referred to as the Early Archaic in this region is somewhat bewildering, as many of the projectile point traditions that represent various groups in the archaeological record lack dated context for many areas where they have been found. What the archaeological record seems to suggest is that many groups—identified by various tool traditions—occupied this region coeval with each other, interacted, and to some extent, shared in similar cultural traditions.

#### Paleoindian-Archaic Interregnum Groups in the Northwestern Great Lakes and Adjacent Geographical Areas

In the Northwestern Great Lakes (see Figure 2), the main cultural complexes

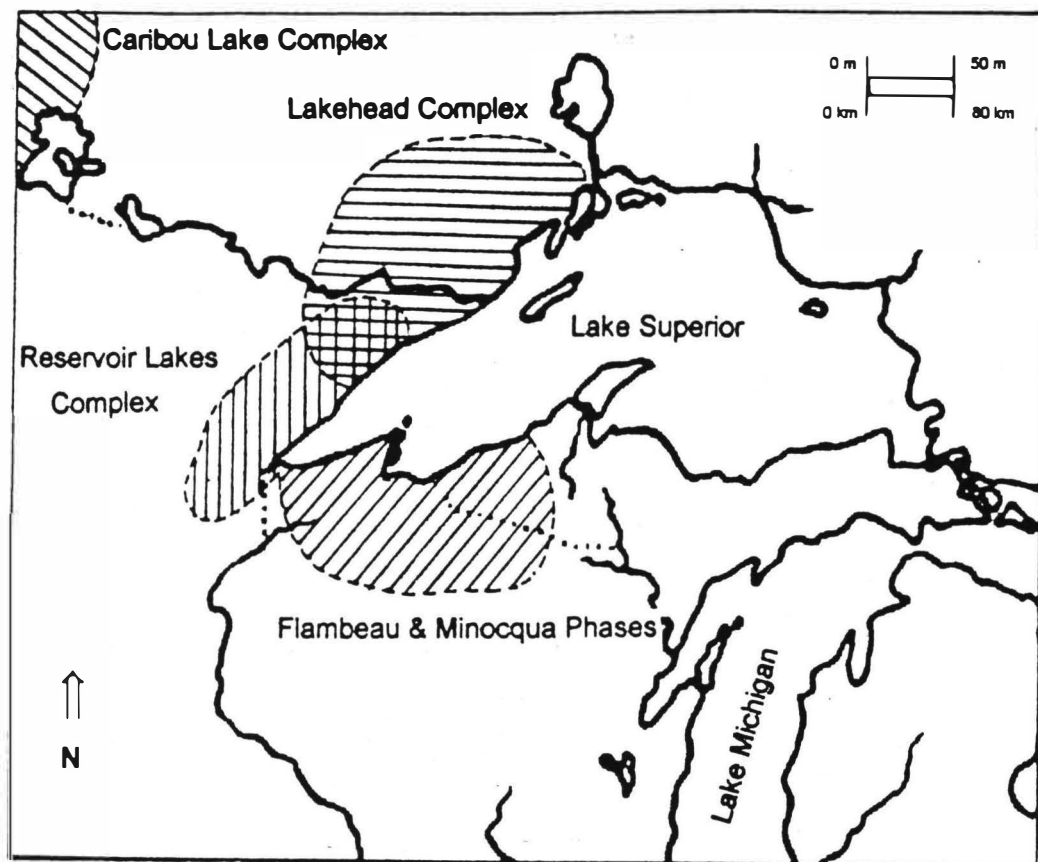


Figure 2. Select Northwestern Great Lakes Late Paleoindian-Early Archaic "Culture Areas" (After Harrison 1995; Ross 1995).

and phases recognized in the archaeological record for the Paleoindian-Archaic interregnum are Flambeau, Minocqua, Reservoir Lakes, Lakehead, and Caribou Lakes (Fox 1975, 1980; Julig 1988; Harrison 1995; Peppitas 1976; Peppitas and Buchner 1983; Ross 1995; Salzer 1974; Steinbring 1974; Steinbring and Buchner 1980; Wheeler 1978). The Reservoir Lakes Complex is primarily known from surface material, and consists of a variety of tools, including lanceolate bifaces similar to Agate Basin and Scottsbluff types although other forms consistent with the Plano morpho-theme are represented (Steinbring 1974; Steinbring and Buchner

1980). This complex is thought to date to 9000 B.P. (Harrison 1995) based on similar sites and on typological grounds.

The Lakehead Complex, first defined by Fox (1975, 1980) and based primarily on two large sites on the northwest shore of Lake Superior—Brohm (McNeish 1952) and Cummins (Dawson 1983; Julig 1994)—is similar in material inventory to the Reservoir Lakes Complex. No doubt coeval with Reservoir Lakes groups to some extent, the Lakehead Complex also represents a Plano manifestation in terms of tool production. The Cummins site contained a cremation burial that dates this occupation to at least 8500 B.P., and probably somewhat earlier.

The Caribou Lakes Complex is a Plano manifestation similar to the aforementioned groupings, found in Manitoba adjacent to the glacial Lake Agassiz region (Pettipas and Buchner 1983). The tool assemblage is similar to the above complexes, although the projectile points found tend to be somewhat “cruder” (Harrison 1995), with Agate Basin and Scottsbluff-like forms represented. This complex may date somewhat later, perhaps from 7500-6500 B.P. (Harrison 1995).

Other cultural phenomena have been identified or described in adjacent regions. The Flambeau and Minocqua phases of the Plano time period in northern Wisconsin have been described by Salzer (1974). The former, identified primarily by sites that contained Agate Basin-like projectile points (see Figure 3), along with a variety of other tool forms, is speculated to date to around 9000 B.P. The later, consisting of similar tool forms, yet with more Scottsbluff-like projectile point forms, is suggested to date to around 8000-7000 B.P. It has been suggested that some of these complexes and phases may actually represent several distinct cultural groups

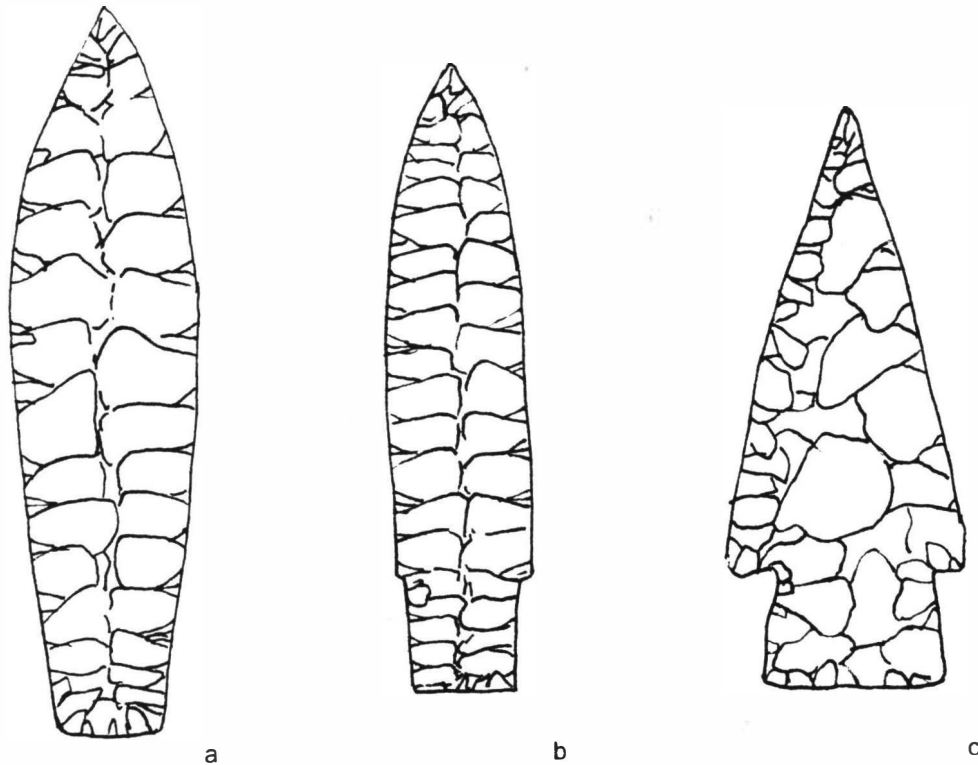


Figure 3. Paleoindian and Archaic Projectile Point Types: a) Agate Basin b) Scottsbluff c) Hardin Barb (after Justice 1987).

and occupations (Harrison 1995), even though the archaeological record has been essentially “lumped” together, no doubt in some instances for the convenience of drawing defining boundaries through various archaeological cultures and geographic areas. Ross (1995) has suggested that all these Northwestern Great Lakes cultural entities be placed into a taxonomically higher order of organization based on their clear interrelatedness: a composite. The “Interlakes Composite” is the term Ross has suggested.

Although these entities, defined of course on the remnants of material culture that are available for description and analysis, are clearly similar in technology, occupied adjacent regions, and quite possibly shared in a similar ideological foundation or worldview, one essential question is how this “composite” of complexes and phases would have looked ethnographically; that is, what would the nature of interaction have looked like socially, economically, and politically? As material similarities have been noted in relation to groups occupying the southwestern Great Lakes during this time (Behm 1985), such as the Hardin Phase peoples, it must also be addressed as to how, on a wider regional scale, the people of the region interacted in order to understand how this might be manifest in the material record. Material culture must be utilized to demarcate social boundaries in this historical context. While the use of terms such as “composite,” “complex,” and “phase” are appropriate for developing chronologies and schemas of culture areas in an otherwise sparse record, they do not answer any particular questions about the nature of social interaction in certain contexts. It would seem that in this case, ethnographic analogy could provide a framework for posing questions about the material record of the Northwestern Great Lakes Paleoindian-Archaic interregnum, since gaps in the archaeological record, compounded with a sparse record in general, obliterate much of the historical context of the Interregnum. While ethnographic analogy cannot act as a proxy to gaps in the available archaeological record, it is nonetheless important to pursue an understanding of the potential forms of social organization that gave rise to technological traditions and modes of social meaning.

## CHAPTER IV

## USING ETHNOGRAPHIC ANALOGY IN THE ASSESSMENT OF SOCIAL ORGANIZATION IN THE PALEOINDIAN-ARCHAIC INTERREGNUM

It would seem reasonable to conclude that certain groups of people living a hunter-gatherer lifestyle would provide a more appropriate analogue for Northwestern Great Lakes peoples of the interregnum than others. In fact, Paleoindian research in the past has relied heavily, and perhaps inappropriately, on Arctic peoples such as the Inuit when an ethnographic parallel has been desired (Custer and Steward 1990; Dincauze 1988; Levine 1997). This has primarily been the result of incomplete reconstructions of the Early Paleoindian environment (Levine 1997), as well as explanations centered on equating social change with environmental change.

It has been suggested that the recent Subarctic peoples of Quebec and Labrador are more appropriate analogues (Custer and Steward 1990) based partly on the fact that the environment the Paleoindian peoples occupied in the Northeastern U.S. was similar to the boreal forest inhabited by groups such as the Cree, Naskapi, and Montagnais in the present and recent past. The environment in the Northwestern Great Lakes no doubt approximated this situation much later, as Late Paleoindian peoples and those of the Early Archaic entered an area that had only recently been deglaciated—much later, that is, than areas to the south and east. The pine-spruce forest that dominated the Northwestern Great lakes region was eventually replaced, perhaps by 8000 B.P., as modern floral communities became established throughout the region (Clayton et al. 1992; Huber 1995; Jacobson et al.



1987; Kuehn 1998; Mullholland et al. 1997; Shay 1971). This transition occurred sometime between the period that the first human occupants entered the area, and the Paleoindian-Archaic interregnum. By this transitional period, many floral communities in the Western and Northwestern Great Lakes were in a transitional period from post-glacial to modern. The environment upon which the Late Paleoindian-Early Archaic communities depended would have limited the number of people that could have occupied the landscape. This, in turn, would have affected the type of social organization and social relations of production possible within this period because of issues of mobility.

While the environment cannot determine the type of social organization adopted by a community, if a community is to survive, it must adapt to the larger bio-physical environment in which its members find themselves through particular strategies in both mobility and the social relations of production. In terms of an environment in transition from boreal forest to a modern mixed forest, the foraging strategy that would be most suitable has been termed “generalized” (Meltzer and Smith 1986; Meltzer 1988). In contrast to this is the “specialized” foraging strategy whose practitioners would have relied on particular sources of biomass—such as caribou, the model of which has formerly dominated the use of ethnographic analogues in the Paleoindian time period. Some of the faunal resources utilized by the Paleoindian-Archaic inhabitants are well documented (Kuehn 1998) and reflect a more generalized foraging strategy. In fact, the Northwestern Great Lakes peoples of the interregnum period, whether using typically “Archaic” or “Paleoindian” tool technology, probably utilized the environment in similar ways for subsistence purposes, relying on a wide range of both plant and animal resources. Of course,

the expanded view across the entire northeast region of North America recognizes that even the earliest inhabitants utilized a variety of resources, including plants, fish, and small mammals (Evans 1985). There is no reason to believe that these resources were not utilized by later occupants of the early landscape.

In conclusion, the appropriate human analogues in this subsistence situation would seem to be those living peoples inhabiting a boreal forest environment that would tend to follow the inferred (and similar) subsistence base. The Western and Northwestern Great Lakes peoples of the interregnum period were likely small, highly mobile egalitarian groups, occupying and preferring riparian environments (Kuehn 1998), practicing a form of organization that would be best suited to a boreal environment and a generalized foraging strategy. Social organization would have to tend toward loose band affiliation in order to reduce risk in an environment with widely dispersed and seasonal resources.

The Innu (Montagnais-Naskapi): Lifeways, Social Organization, and Their Use as Analogues for Peoples of the Paleoindian-Archaic Interregnum Period in the Northwestern Great Lakes Region

The indigenous peoples of the Eastern Subarctic, known currently as the Innu (Levine 1997), are organized in bands, which have functionally changed to adapt to the political circumstances wrought by the fur trade, yet have remained relatively consistent in terms of organizational structure through recent history. Some significant changes have occurred because of the introduction of market capitalism through the fur trade (Rodgers and Leacock 1981), such as the establishment of

trading post bands and the development of clearly defined band territories. This was not the case before contact with Europeans, and as such, the social organization and practices of the Innu before the 17<sup>th</sup> century must be acknowledged and utilized as a more appropriate analogue to interregnum peoples of the Northwestern Great Lakes. This is not because the 17<sup>th</sup> century and earlier Innu are somehow more “pristine” examples of the primitive, but because the use of earlier accounts, before the advent of the fur trade, can perhaps disentangle some of the far reaching effects of capitalism on a small scale society—which would invariably cause profound changes in their social organization and relations of production.

Before the advent of the fur trade, Innu social organization was based on loosely affiliated “lodge groups,” comprised of three or four families, or between 15 and 20 people (Rodgers and Leacock 1981). Several lodge groups would tend to aggregate during certain seasons. The *Jesuit Relations*, the primary source for early accounts, contends that group affiliation was relatively loose, groups moved constantly, and aggregations were carried out at predetermined places and times. In order to reduce risk, groups split up and spread out during times of resource scarcity in order to access game, yet remained close enough to rely on other groups if starvation threatened. This degree of mobility and flexibility in social organization shows the necessity of such social adaptation in the boreal forest environment (Custer and Stewart 1990).

I propose that ethnographic analogies based on Subarctic peoples, who followed a generalized foraging strategy, lived in a boreal forest environment with sparse resources, and maintained a loosely affiliated band structure are possibly appropriate in making inferences about Paleoindian-Archaic Interregnum peoples in

the Northwestern Great Lakes. Therefore, I intend to use these peoples and their organizational structure as a basis for interpreting the kinds of social organization that were likely to have existed during the Interregnum period. Through the use of these analogues, a clearer picture of social organization, structure, and social practice may emerge.

## CHAPTER V

## THE GORTO SITE: INVESTIGATING AN INTERREGNUM CONTEXT

The Gorto site (20 MQ 39) was found in 1987, on the original shoreline of Deer Lake in Marquette County, Michigan. Following the draining of the lake for cleanup purposes, a large scatter of projectile points and other lithic material was located. A salvage excavation was conducted while the waters of Deer Lake rose, and eventually inundated the site. Based on this excavation a preliminary report was compiled and published that described the results and findings of the excavation (Buckmaster and Paquette 1988).

The remains of what appeared to be a cremation were investigated and several material items were recorded or recovered as well—a large feature with postmolds, several thermally altered Scottsbluff-like bifaces, and other concentrations of artifacts along the ancient shoreline of the lake. A total of 86 biface fragments and nearly complete bifaces were recovered, in association with two discrete surface concentrations and the single feature—spread out over an area of roughly 80 linear meters. Three additional surface concentrations yielded artifacts that may not be associated with the Paleoindian-Archaic activities at the site. In all, nearly 18 bifaces were complete, or nearly complete, with fragments that represent up to 20 others, as bases, tips, and blade sections (see Appendix A). Most of the complete or nearly complete bifaces were manufactured from Hixton silicified sandstone, the source of which lies in southwestern Wisconsin. Five bifaces were fashioned from various, and assumedly, local materials, including chert and quartz. The excavated feature (which was not fully excavated to its maximum depth [M.

Buckmaster, personal communication, 2001]) that was part of concentration “A” contained all of the bifaces that were recovered, except for four blade sections. It is the bifacial tools recovered from this concentration that this study focuses on.

Other areas of the site contained discrete concentrations of other artifacts, all being some distance from the excavated feature. Because of the nature of these artifacts, there is no clear association with the excavated feature (refer to the original report for supplementary information). It should also be noted that other artifacts and sites were located around the shores of Deer Lake during this time.

#### Ritual and Mortuary Context in the Northwestern Great Lakes Paleoindian-Archaic Interregnum

Several Northwestern Great Lakes sites seem to be similar to Gorto. The Renier site (Mason and Irwin 1960), which lies at the base of the Door Peninsula in Wisconsin, contained the cremated remains of one individual, as well as many tools manufactured from the Hixton raw material. The tools, much like the Gorto assemblage, were thermally altered—cracked in many instances from intense heat—leading the authors to conclude that these items were in fact burned with one or more individuals. The Scottsbluff-like points of the Renier site are morphologically quite similar to the Gorto assemblage, displaying some of the attributes that are known to be distinctive of Northwestern Great Lakes Scottsbluff assemblages.

Renier and other sites in this region that exhibit similar depositional contexts to the Gorto site likely represent a widespread ceremonial complex (Dawson 1983; Kuehn 1998; Ritzenthaler 1972)—or ceremonial worldview. Compared to an

otherwise sparse record of excavated material for this time period and region, the ceremonial context sites seem abundant. In clear contrast, western sites (those west of the Mississippi River drainage) are usually determined to be habitation or kill and/or butchery sites. Rather than the result of bias in the archaeological record, I would suggest that this phenomenon was an effect of a somewhat ambiguous political and social network in the Northwestern Great Lakes Paleoindian-Archaic transitional period, resulting from the type of social organization that was practiced. In other words, the abundance of ritual sites from the Great Lakes Interregnum may be more than coincidence, and may be the direct product of a dynamic, rapidly shifting, or even unstable political order in the region resulting from the movement of populations, boundary formation and/or contestation, and even environmental change. This, of course, would be reflected in the material culture produced by the inhabitants of the Northwestern Great Lakes during this time.

It has been suggested (Justice 1987) that the Cody Complex, the tool tradition that includes the Scottsbluff biface form, is invariably a phenomenon of the High Plains, and that whatever the lifeway of Western groups, the people that inhabited the emerging Eastern Woodlands and made Cody-like tools were probably leading a vastly different way of life regardless of the material similarities. Perhaps, unlike Western sites, the material culture assemblages of the Northwestern Great Lakes Interregnum peoples—mainly lithic bifaces, as well as other material—would not be of a stylistically homogeneous nature, but would instead, be quite heterogeneous, directly reflecting an ongoing formation, contestation, and negotiation of this political and social order. In fact, it has been remarked (Harrison 1995) that many of the Late Paleoindian-Early Archaic Interregnum sites adjacent to

the Upper Peninsula of Michigan contain lithic assemblages that are highly variable stylistically and possibly represent multiple cultural entities occupying the same sites over time. I maintain that a divergent explanation may suffice—a point that I return to below.



## CHAPTER VI

METHOD: THE CASE FOR *CHAÎNE OPÉRTOIRE*

The complete points (and nearly complete or refitted points) from the Gorto site were originally analyzed using metric dimensions such as maximum width, length, thickness, stem width, length, basal width, and weight (Buckmaster and Paquette 1988). Other aspects of point morphology, such as flaking pattern and blade shape were briefly described in the original report (A preliminary description of the Gorto assemblage was provided in the original report [Buckmaster and Paquette 1988] and should be referred to for details). While the former dimensions are helpful in comparing like dimensions of similar artifacts from temporally associated assemblages, they alone are not adequate in elucidating certain aspects of variability in point morphology and stylistic attributes within the assemblage and between assemblages. Aspects of point manufacture, however, are not often considered in the analysis of stone tools. In general, this would require a different approach to lithic analysis, one that could, to some degree, provide information on the nature of the manufacturing technique in order to more fully interpret the underlying structures of technological production. The *chaîne opértoire* technique, introduced below, may provide a basis for such analysis or assessment.

The *chaîne opértoire*, or “operational chain,” technique has a history of being utilized to uncover the underlying mental processes involved in the manufacture of cultural objects. While this is not the exact usage that I have adopted in this work, aspects of this loosely defined analytical technique are helpful nonetheless. In short, the *chaîne opértoire* technique involves observing and inferring the stages of

production and use in the life history of an artifact (Dobres 1999; Lemonnier 1986, 1989, 1992; Stark 1998). It has been suggested that culture is embedded in technology, that technology, as a social practice, consists of action and agency in which social meaning is constructed, contested, and reproduced (Dobres and Hoffman 1999). In this view, technical action is as vulnerable to the nuances of the “making” of culture as other actions; technical actions, however, leave certain traces for analysis and interpretation by the archaeologist.

It is in the analysis of production sequences and technical activities that an understanding of social relationships starts to emerge. The *chaîne opératoire* technique, which has evolved into slightly different variants in terms of different forms of material culture, is useful in lithic analysis for several reasons. Firstly, most analyses of lithic assemblages generally consider style within the parameters of a finished, usable, and ultimately discarded object. Hence, there has been particular reliance on typological nomenclature in lithic analysis. While this has been useful in determining culture areas, it does impose scalar limitations on the type of information that can be inferred from material assemblages. In short, typologies tend to validate normative assumptions, drawing discrete boundaries around style, ethnicity, and technological practices. Projectile points, or other bifacial implements, are often considered as complete objects within space, with little regard to the operational sequences, techniques, and relations of production that brought them into existence. In terms of the typological approach, style resides *exclusively* in the attributes of the finished form—the sum total of arbitrarily assigned elements of significance, such as corner notching and blade shape, among others. This approach results in exclusive etic definitions of what is stylistically significant. While it is not at all apparent as to

whether etic formulations of typology based on etic formulations of style correspond to extinct emic ideas of the same, typology still has its uses in archaeological interpretation, such as observing material culture changes over time. However, I will generally not be methodologically employing typology here as a basis for analyzing the bifacial tools from the Gorto site. The application of labels is only utilized for the sake of convenience when referring to certain implements. The assumption I am making is that material object “types” do not easily correlate with ethnic entities, at least not in all cases (Jones 1997). And while it seems improbable that a complete understanding of emic values in terms of style can be reached in any context, an understanding of the production processes that result in usable cultural objects is a first step. The overarching assumption I will apply in this lithic assessment is that patterns of technical choice, not simply stylistic attributes, exemplify social affiliation (Lemonnier 1986, 1989, 1992)—whether cultural, ethnic, or otherwise.

I have focused, in this study, on the final stages of point manufacture in the bifacial implements found at the Late Paleoindian-Archaic Gorto site as a means of determining patterned sequences of production, and to develop an understanding of the primary basis of stylistic (and possibly ethnic) differences within the assemblage—differences I would attribute to socially embedded technical choices (Dobres 1999; Pfaffenberger 1999). Ideally, a lithic analysis utilizing an operational chain approach would follow the entire “life” of an implement, from extraction of raw material to loss or discard of the object. I will focus on a small part of the entire process, which is that of the final stages of haft production.

There is one primary reason why haft production trajectory is the focus of this assessment. Behm (1985) determined in his analysis of Hardin Barb points that

the most significant differences in point morphology over a wide geographic area occur in haft morphology. This aspect of projectile point morphology in Hardin Barb points shared more characteristics with Cody Complex tools found north of the study area (the Northwestern Great Lakes) and displayed more overall clinal variation on a north-south axis within the study area than did aspects of blade morphology. So focusing on blade morphology may obscure production differences. Because the haft is generally produced within the final stages of point manufacture and is likely less prone to further reduction through retouch and curation, it is generally possible to determine the final stages of this process and observe the variation in the final forms.

While blades could potentially be produced to “signal” information about social boundaries through intentional differentiation or mimicry, assuming any aspect of the information exchange theory is applicable, the haft seems less likely to convey any kind of information signaling, since in essence, it would generally be covered by hafting material on whatever haft or handle on which it was mounted. It would seem, therefore, that the haft of the point would be more apt to follow “what works,” or any particular durable dispositions maintained in the social psyche of a given community of technological practice—that is, its *habitus*.

One of the assumptions that this methodological analysis rests on is that communities of technical practice contribute to the process of building and maintaining intersubjective meaning between participants (Sassaman and Rudolphi 2001; Pfaffenberger 1999). It is this process that mediates the production of material culture in a domestic or communal mode of production. In short, discrete communities of practice should be archaeologically reflected by the nature of the

objects they produce; that is, patterns of production should be similar between agents that share in a community of practice, as technical gestures incorporated in production are produced in the process of socially defining meaning and value (Dobres and Robb 2000b)—that is, in *habitus*. I would maintain that the same may not necessarily be concluded for “attributes” of an object—etically defined aspects of technological objects such as blade shape, width, or length (to use some common attributes from a lithic context)—because, as Sassaman and Rudolphi (2001: 410) contend, “...changes in the learning trajectories, social identities, and forms of membership over the course of one’s lifetime mediate the relationships between material expressions and cultural affiliation.” General *techniques* of production, because they emerge and are maintained through the production of intersubjective meaning, are subject to durable dispositions, or a *habitus*, (Bourdieu 1977; Dietler and Herbich 1998) that allow their continuity over time. This is not to suggest that culture is a mental template, but rather, that what is learned socially is first formed in the discursive space between individuals. Like all forms of discourse, technical knowledge is negotiable in the social sphere. Yet all things social, especially those things objectified, are subject to durable dispositions.

Of course, form or theme can be replicated by a knowledgeable technician. Anyone can mimic form, if desired, through a number of various production trajectories—what Sackett (1986; 1990) terms *isochrestic* variation. Attaining similar form through replication of technique, being outside the community of practice, is not so simple however, especially when the production sequence must unfold in a certain order. What is perhaps somewhat unique about the bifacial tools produced by the peoples responsible for the Cody Complex is the consistency of the point

manufacturing process in regards to bifacial reduction sequence; that is, to achieve the highly regular flaking pattern in accord with the final form and shape, a fairly "standard" reduction sequence was generally followed. Bradley and Stanford (1987) investigated the process of Scottsbluff point production in an experiment that replicated this process. They found that the reduction method utilized by the makers of Cody Complex points was quite methodical in execution of production steps. While the overall shape of this point form is not necessarily difficult to achieve for a lithic knapper with even intermediate proficiency in the skill, the degree of motor control necessary to achieve the consistent transverse or collateral flaking pattern through all stages of manufacture requires a high degree of knapping proficiency and production knowledge. Of course, variation exists in any assemblage, and in the bifacial tools found in the Gorto collection, variation seems the norm, rather than the exception.

#### A Qualitative and Quantitative Assessment of the Gorto Assemblage

In terms of attribute morphology, such as basal shape, the Gorto collection displays a high degree of attribute variability compared to many assemblages found in the western U.S. (Ingbar and Frison 1987). The assemblage contains bifaces that are clearly "notched" and/or "expanding stem," representing variations in the Archaic tool traditions, as well as lanceolate stemmed points that are typical of known Paleoindian projectile point traditions (see Figure 4, 5, and 6 and Appendixes). Many of the points display a "mixture" of the traits associated with both of these traditions, and are not clearly and discretely of one tool tradition or the other. The

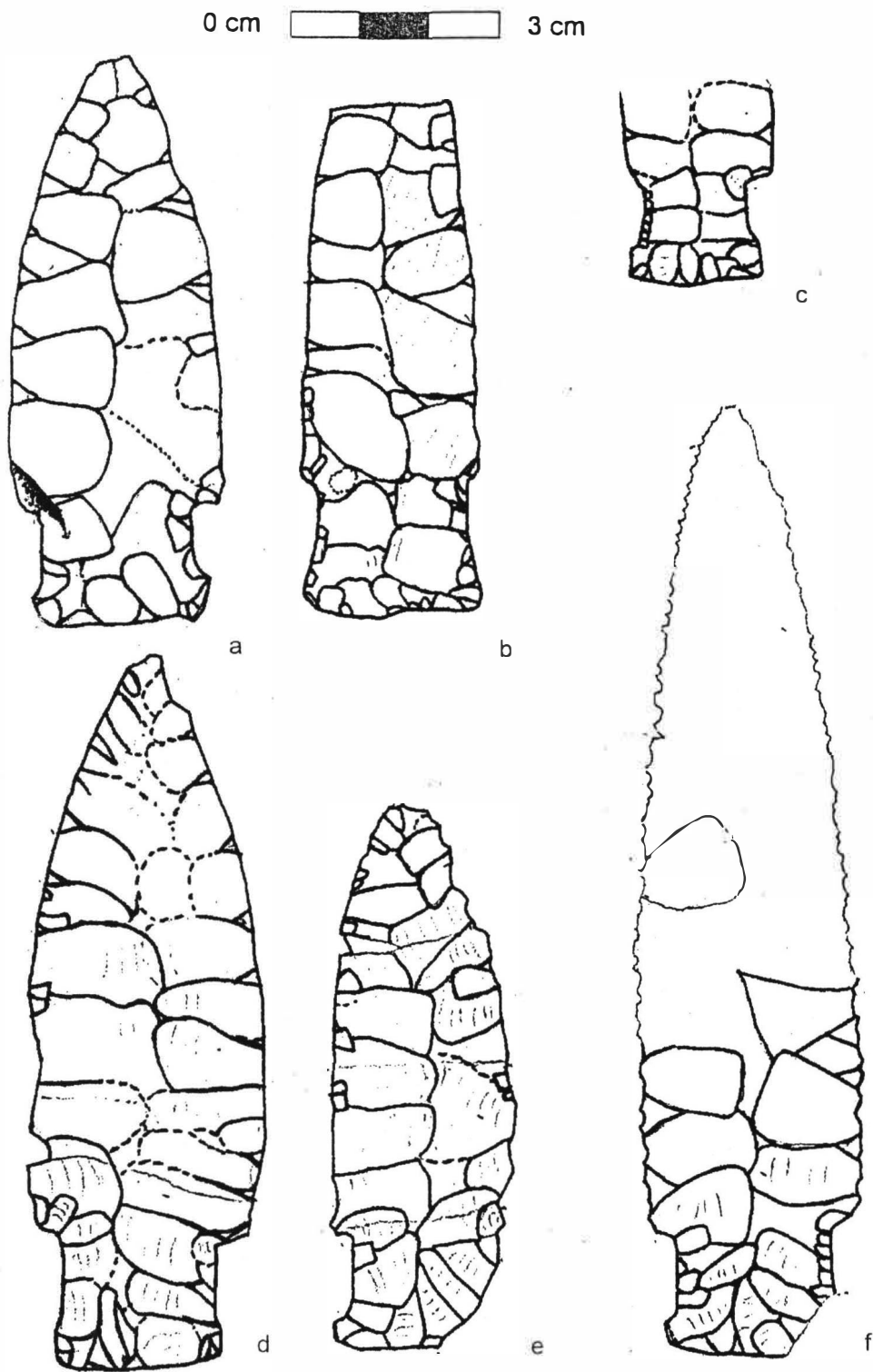


Figure 4. Gorto Assemblage "Eared" Scottsbluff Variants.

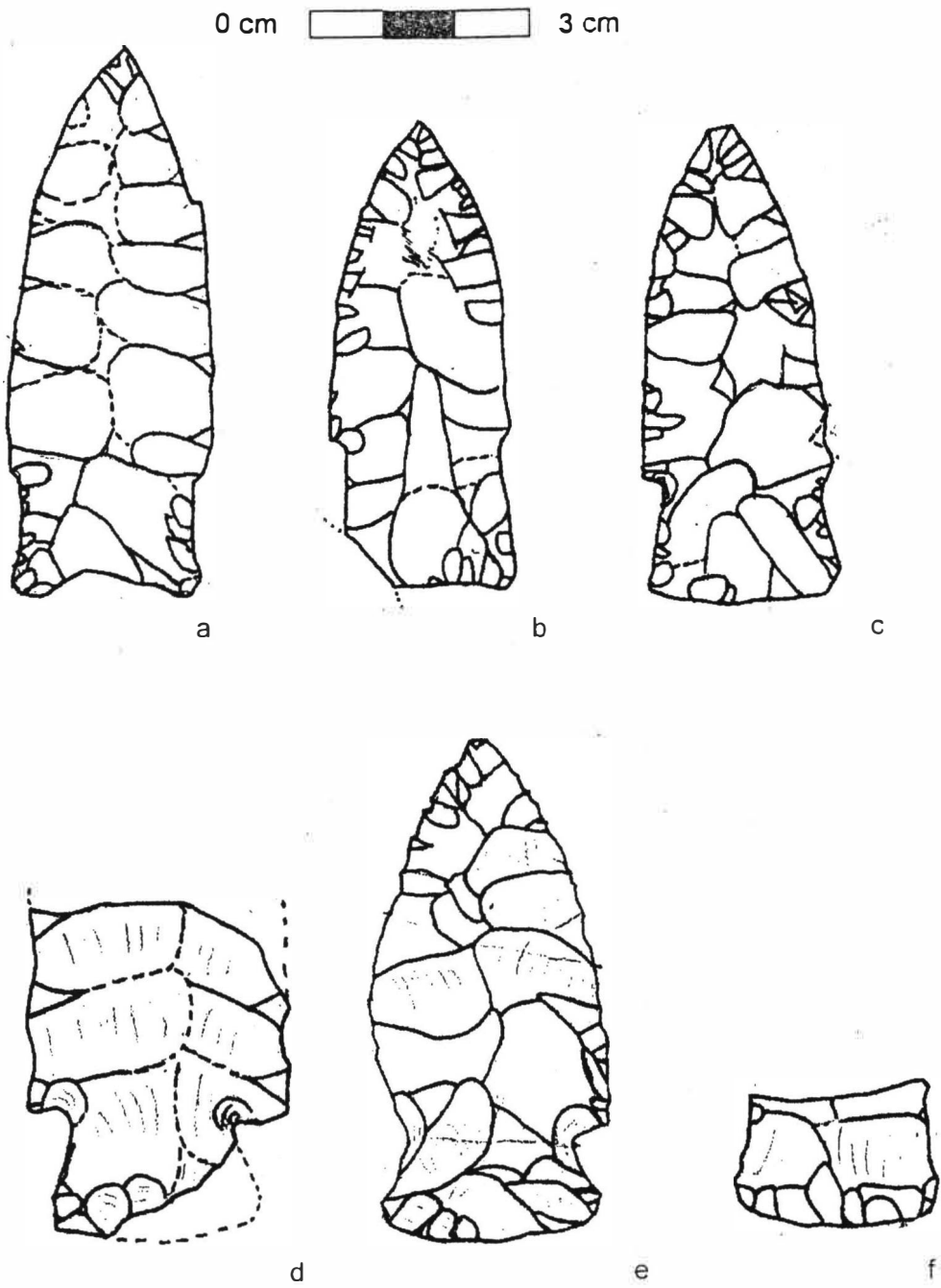


Figure 5. Gorto Assemblage "Expanded Stem" Bifacial Tools.



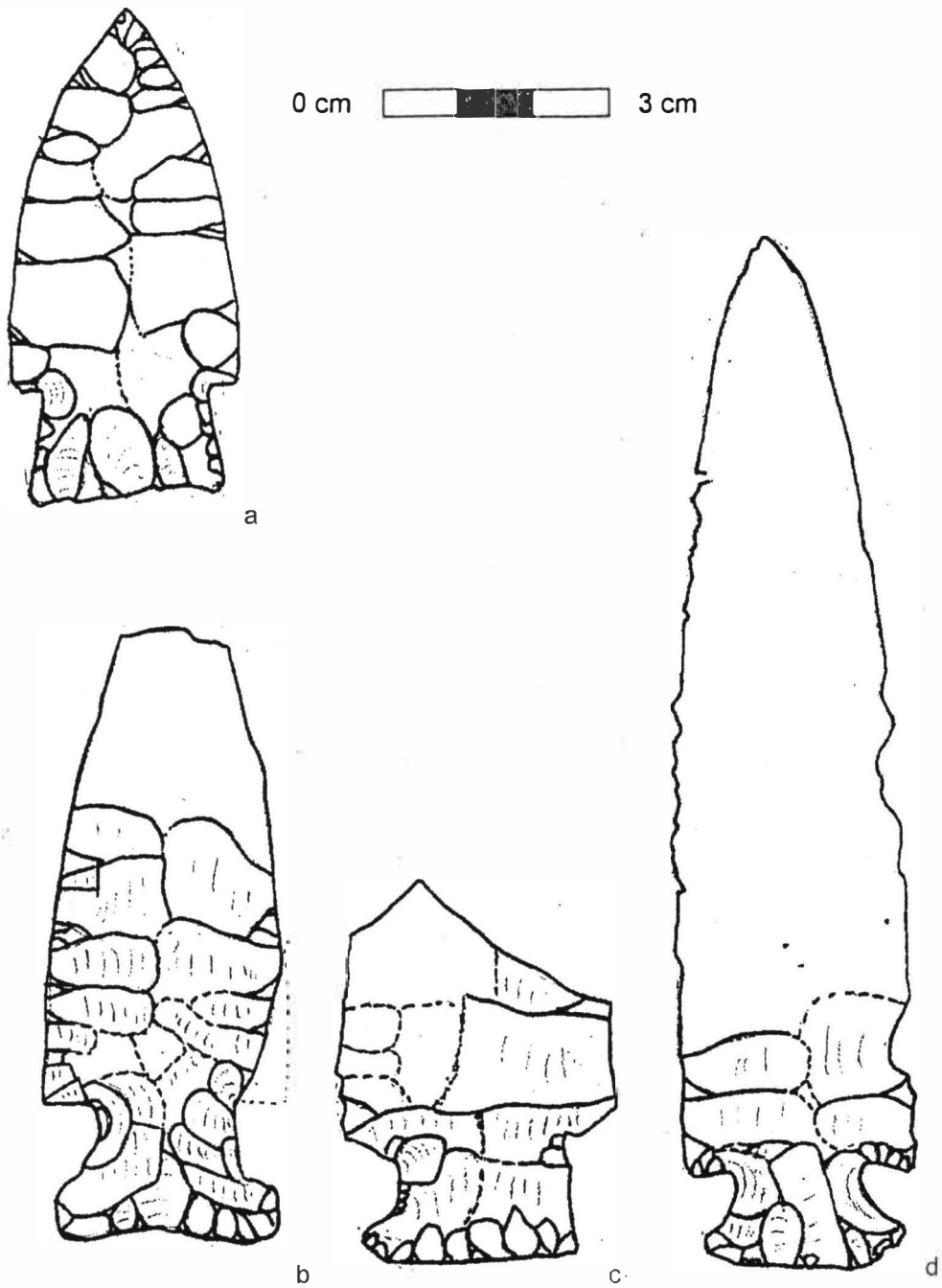


Figure 6. Gorto Assemblage "Expanded Stem" Bifacial Tools.

basal elements of the bifacial tools seem to fall within either an “expanded stem” variety, or an “eared” variant of the lanceolate tradition (with one tool that is clearly “notched”). The “eared” variety typically have parallel basal margins and small protuberances (about 2 mm or less) at the base of the lateral margins of the basal element.

The bifacial tools in the assemblage were measured for many linear dimensions, although the small sample size (N = 19, which includes one point base without a blade; only 18 of the bifacial tools were included in analysis, since one of the tools was produced from quartz and the flaking pattern was almost entirely indeterminate) of bifacial tools generally prohibits application of any meaningful statistical test that would detect a difference between what could be described as “expanded stem” and “eared” variants of the points in the collection. In order to collect information that could be used in an analysis of the operational chain used in the production of the basal elements of the points, the flaking pattern of the tools were observed and illustrated, with a focus on determining the exact flaking trajectory of the basal elements. A scanned facsimile of each point was used to verify whether the illustrations were accurate. Calipers were used in illustrating to measure the relative location of each flake along the point mass. Next, the flaking sequence was determined by assessing which flakes were clearly overlaying adjacent counterparts. This was not always discrete and detectable, and some portions of basal element reduction sequences were indeterminable or not distinguishable enough to draw definitive conclusions. Some aspects of this method were somewhat subjective, as the raw material made for difficult interpretation of

flaking sequence in some cases. While the entire sequence of lithic reduction cannot be re-created without the debitage that was eliminated, the latter stages of point production can generally be inferred from the remaining flake scars on the finished object where they can be distinguished. Because the manufacture of bifacial tools is in essence a reductive technology, it can be determined with a certain level of certainty which flakes preceded which sequentially in production of the tool. And while this analysis cannot be carried out with an absolute level of control, the conclusions remain an interpretation. Although the cross sections of each point varied, the sides where a median ridge was more clearly observed were used in the analysis and illustrations. The reason for this is that the flaking patterns on the more pronounced ridge side of the point were more easily observed, and this method standardized which side was analyzed.

In order to test whether there was a statistically significant difference between the basal production trajectories of the “eared” (N = 6) and “expanded stem” variants (N = 11), data was collected that could be used in statistical tests. The number of lateral margin thinning flakes removed from the basal elements was observed and recorded, as well as the number of proximal base thinning flakes, the number of retouch flakes along the lateral margins, the number of retouch flakes along the proximal base, and the number of small retouch flakes used to “notch” the corners at the blade/base junction. These were the most accessible “flaking traits” that could be recorded and assessed quantitatively. An analysis of the data collected in these observations is provided in the section below.

Following data collection, I attempted to determine whether there were any dominant production sequences and techniques used in the production of the

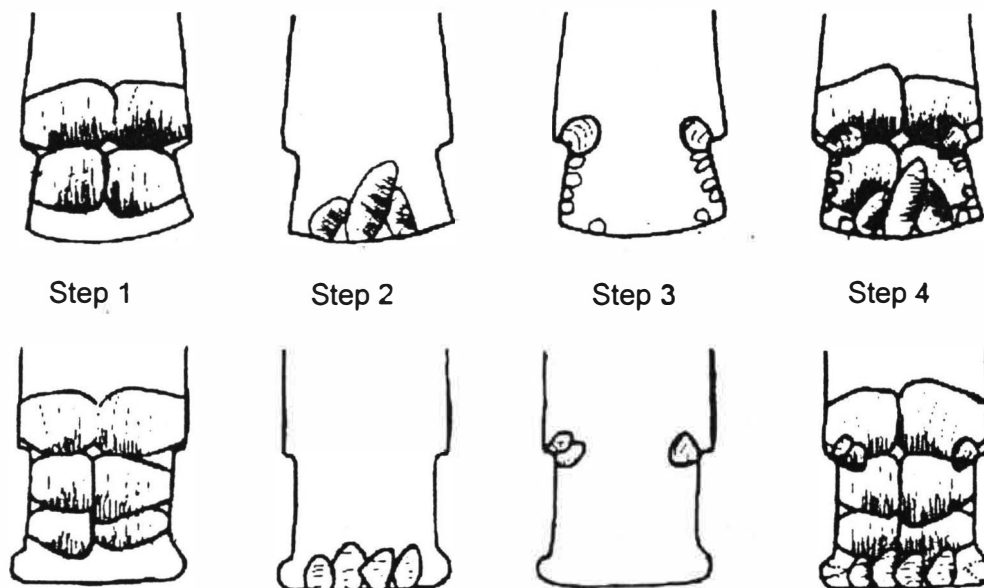


Figure 7. Idealized Reduction Sequences for the "Expanded Stem" (Upper Row) and "Eared" Variants (Lower Row).

"eared" and "expanded stem" tools that would demarcate them as exclusive "types". Figure 7 represents an idealized schema of the production sequences involved in the production of the haft elements of these grouped points. This figure (Figure 7) is an interpretation of how the basal morphology of the tools would have been developed by the tool makers. Figure 7 demonstrates the generalized and final production stages of the haft elements as interpreted from the original objects. The upper sequence, from left to right, demonstrates that in the points that display an expanding stem—a feature associated more with Hardin Barb points than Scottsbluff-like bifaces—the same flaking techniques used in production of the blade were utilized in the same essential sequence in the haft—that is, a "typical" Cody

Complex flaking pattern. This production step was then followed by several long, thin, and often angular flakes being removed from the proximal end of the haft, most likely to facilitate basal thinning and ease in hafting the tool. Thereafter, the basal margins were "retouched" by the removal of small flakes, coeval with the removal of small cone flakes from the corners, or upper margins of the haft element at the juncture with the blade. Some of the hafts presented in Figures 5 and 6 do not seem to conform to this idealized production schema. For instance, the haft shown in Figure 5 (e) seems to display randomized flaking.

The lower sequence in Figure 7 represents the idealized production sequence of the hafting elements shown in Figure 4. While the production sequence of these points is nearly identical to the expanding stems shown in Figures 5 and 6, one notable exception occurs. The points that are "eared" (from Figure 4) typically have more parallel haft margins as a likely result of removing equal numbers of thinning flakes along the lateral haft margins (the exception to this is "b" in Figure 4, which has only slightly observable "ears" along the base of the haft).

The expanding stem versions would have required the removal of more flakes from the upper margins of the haft than that of the straight-sided hafts. In the straight-sided hafts, only an offset continuation of the blade removal sequence along a determined section of the blade would have to have been carried out by the knapper. This, ostensibly, resulted in the creation of "ears" along the base of the haft element in the straight-sided hafts—an "attribute" that does not stand alone in the sum of stylistic components, but is exclusively dependent on the exact production sequence that made its occurrence possible. Figure 8 displays aspects of this reduction trajectory that would result in the differences in haft morphology. In short,

using this attribute independently as an objective aspect of style would wholly ignore the potential social grounding of the production technique that brought this attribute into existence.

Overall, there seem to be more similarities than differences in the production of haft elements between the "eared" and "expanded stem" points in Figures 4, 5, and 6, which would be expected for a given community of practice or those communities of technological practice that were closely related. However, there are some notable nuanced differences that can be described in general terms. These nuances could be described as a) flake removal along the entire lateral basal margins in the expanded stem forms, eliminating the presence of basal "ears" b) comparatively long and angular basal thinning flakes that tend to intersect the center of the haft in the expanded stem form. However, the basal shape alone is not an adequate indicator of the production processes utilized to reach these respective morphologies. Figure 8 demonstrates that the basal "ears" were produced by a lateral basal margin reduction trajectory in these forms that included only a portion of the haft, whereas in the "expanded stem" form the entire lateral margins of the haft were flaked.

Some of the basal elements shown in Figures 4, 5, and 6 have production trajectories that vary significantly from the other tools. For instance, the haft shown in Figure 6 (c) was produced using multiple, large and deeply impressed hertzian cone flakes to significantly "indent" the upper margins of the haft element, creating in turn, an exaggeration of the expanding stem theme. The removal of these flakes was likely carried out by indirect percussion, which may not have been the case for the other tools in the "expanded stem" category. While most of the points in the

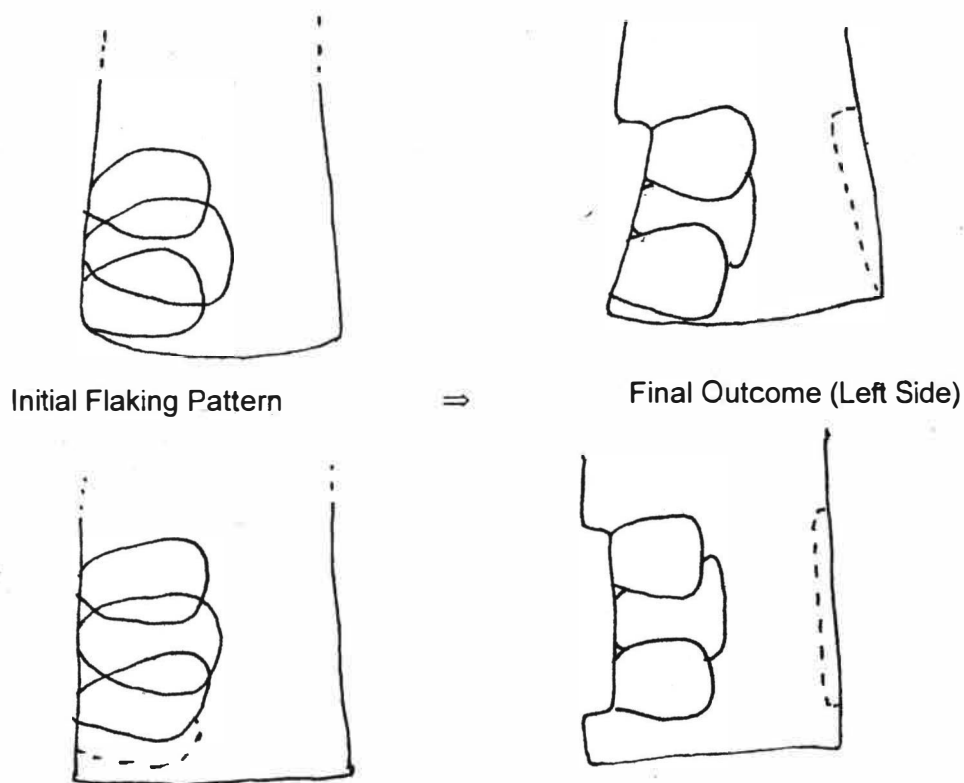


Figure 8. Lateral Basal Margin Production Trajectories For "Expanded Stem" (Upper Row) and "Eared" Variants (Bottom Row) Showing Placement of Margin (One Side Only) Flakes.

collection follow a similar technique in reducing the lateral margins of the stem, this point diverges significantly. The haft seems to have been manufactured by a production technique that is unparalleled in other points; that is, the flakes that are represented in the haft were all initiated at the same platform site, rather than alternating interval platforms along the margins as in the other points in the collection. This also diverges from the technique used in blade reduction, which is

invariably Cody-like. Also, this step in the production sequence of the haft seems to have been the final step in the haft manufacture, converging significantly with the sequential order of flake removal typically seen in the other "expanded stem" bifaces.

The specimen shown in Figure 6 (e) was also manufactured in a similar production sequence. The basal "notches" in this haft were no doubt produced by the same technique of manufacture—indirect removal of flakes—while the sequential placement of this production step is more in accord with the hafting elements shown in the other bifaces. The flake scars that remain indicate that the platform site for removal of the "notching" flakes was also restrictive—meaning that flakes were removed by alternate turning of the biface and striking off flakes along the platform that was created by the removal of a notching flake on the opposite side. This is essentially the same technique used to produce the haft shape in Figure 6 (c). The long, angled flakes removed from the proximal end of the haft are similar in form to the corresponding basal thinning flakes in the "expanding stem" form.

The haft shown in Figure 6 (d), is quite similar in manufacturing sequence to those hafts shown in Figure 4, the divergence being with the extent of flake removal on the basal margins, that gives the haft an appearance of side-notching. While it could be argued that this point is in fact side-notched, the fact that there is essentially no difference in the technique of manufacture as the "eared" variety of points in Figure 4 would seem to place this point squarely in that category. However, the opposite side of the biface reveals that deep hertzian cone flakes were removed at the platform site created by the removal of the lateral margin flakes on the median ridge side of the biface. This technique is much like that used to produce the hafts of points (c) and (e) in Figure 6.



The haft shown in Figure 5 (a) is morphologically in a category of its own. The incurvate base is more reminiscent of Dalton Cluster points from the southern US, although the blade is flaked in the same production technique as the other Cody-like points in the collection. The thinning flakes removed from the base of the haft were done in much the same manner as those removed from the lateral margins in points (c) and (e) in Figure 6; that is, an alternating platform was created by striking off flakes from the opposite sides of the biface. This is the only haft in which this technique was carried out in proximal end base thinning.

Not shown in Figures 4, 5, and 6 (but see Appendix A.5) is the only point in the Gorto collection that is typically and completely “Archaic” in morphology, having no general Cody Complex attributes. Much like the Thebes Cluster (Justice 1987) technologies, from which it was no doubt derived, this point displays production techniques that are wholly divergent from those used in the manufacture of the other points in the collection. The remaining question, it would seem, is how this point relates to the other bifaces in the collection—which is discussed below.

I suggest, based on the data, that the points collected from the Gorto site were manufactured by multiple individuals. In light of the minor stylistic differences within the biface groups (See Figures 4, 5, and 6) that I have divided based on haft morphology and production similarities, it seems probable that multiple individuals contributed to the record at one point in space and time—the context of the Gorto site. Based on the fact that the Gorto site is not necessarily a unique context in the region, this assertion is partly warranted.

The points that do not correspond to the general reduction and production sequences tend to have “exaggerated” attributes. For instance, Figure 6 (d) is wider

in maximum (available measurement) blade width than any other intact points in the assemblage (at 42.0 mm, only the Archaic point in Appendix A.5 is wider). Point 213 in Figure 6 (c), had it not been broken at this point of measurement, would surely also have been among the widest points in the collection. Also, Point 200 (Figure 6e)—one of the “side-notched” forms—is longer in total length than any other complete point in the collection (155.8 mm), and, perhaps, than any other point initially deposited at this locale many thousands of years ago. In essence, these bifacial tools are not only divergent in production technique, but are statistical outliers in certain linear measurements.

In order to test for a statistically significant difference between the typical “eared” and “expanded stem” points in certain quantitative aspects of the production trajectories, Fischer’s exact probability test was utilized. The variables previously described ( [1] the number of lateral margin thinning flakes removed from the basal elements, [2] the number of proximal base thinning flakes, [3] the number of retouch flakes along the lateral margins, [4] the number of retouch flakes along the proximal base, and [5] the number of small retouch flakes used to “notch” the corners of the blade/base junction) were used to test for statistical differences. These variables were selected because of the possibility that even though the production trajectories of the basal elements were similar between the point “types,” any difference in the number of flakes removed in the process would certainly demonstrate a significant difference in the reduction sequences and justify typing the points based on “attributes” of the basal elements. Fischer’s exact test is ideal when a statistically significant difference needs to be detected between two groups and only a small sample is available. Because Fischer’s exact test calculates table probability, or

table configuration, expected counts less than 5 in a 2 by 2 contingency table are not problematic. The data were entered into the statistical analysis program SAS, version 8.02, and all of the calculations were performed using this program.

In order to produce 2 by 2 tables for the haft element "types," the data (for variables 1 through 5, described above) were divided by an arbitrary cutoff point, creating dichotomous variables. The cutoff points are as follows. For [1] the number of lateral margin thinning flakes removed from the basal elements:  $\leq 4$ ,  $> 4$ . For [2] the number of proximal base thinning flakes, the division point was  $\leq 3$ ,  $> 3$ . For [3] the number of retouch flakes along the lateral margins, the cutoff point was  $\leq 3$ ,  $> 3$ . This division point was also applied to [4], the number of retouch flakes along the proximal base. For [5], the number of small retouch flakes used to "notch" the corners of the blade/base junction, the cutoff point was  $\leq 2$ ,  $> 2$ . These cutoff points were selected based on the variable midpoints for value ranges in the data set.

The Fischer's exact tests yielded conclusive results. There were no statistically significant differences between the "eared" and "expanded stem" forms for any of the five variables. With 1 degree of freedom for each test, the  $p$  values for table probabilities (where "expanded stem" and "eared" variants were the table row variables and the relative number of flakes were the column variables) were as follows: [1] the number of lateral margin thinning flakes removed from the basal elements,  $p = 0.22$  ( $N = 17$ ); [2] the number of proximal base thinning flakes,  $p = 0.33$  ( $N = 16$ ); [3] the number of retouch flakes along the lateral margins,  $p = 0.33$  ( $N = 16$ ); [4] the number of retouch flakes along the proximal base,  $p = 0.48$  ( $N = 16$ ); and [5] the number of small retouch flakes used to "notch" the corners of the

blade/base junction,  $p = 0.37$  ( $N = 16$ ).

These tests demonstrate that there is no statistically significant difference (at the  $\alpha = 0.05$  level) in the proportion of flakes removed from the basal elements between the "eared" and "expanded stem" biface forms. There are, in other words, no detectable quantitative differences in the number of flakes removed, by category, from the basal elements of the "eared" forms compared to the "expanded stem" forms. While this does not definitively demonstrate that there are no differences between the point forms, it does lend credence to the argument that the "eared" variants and the "expanded stem" variants are at least quantitatively similar in production based on these tests. However, the quantity of flakes of particular form removed from the basal elements do not represent the entire production trajectory, so these tests do not cover all aspects of basal manufacture.

The results of separating the Gorto collection points by basal morphology are somewhat inconclusive in that many aspects of the bifacial production trajectory must be considered. What I would conclude, based on a qualitative and quantitative analysis, is that while the overall differences in basal morphologies of the "eared" and "expanded stem" forms seem evident, there may be little justification in concluding that they represent different artifact groups or "types." As an extension of this argument, there seems to be little evidence that different "ethnic" groups are represented by the material differences that do exist, although somewhat distinct, yet closely affiliated communities of technical practice may be indicated.

## CHAPTER VII

## AN INTERPRETATION OF THE MATERIAL CULTURE FROM THE GORTO SITE

Although there do not appear to be many differences in production trajectory for the basal elements from the Gorto assemblage, an explanation for any variation in form and manufacture may rest on a simple association between technological similarities and social organization based on distinct communities of technical practice. Part of the basis of this argument depends on an observation of the assemblages from other Paleoindian-Archaic Interregnum sites. The points shown in the original report from Renier site (Mason and Irwin 1960) are all of the expanded stem variety—or what has been typologically called the Scottsbluff II form. Likewise, most of the points from the Pope site (Ritzenthaler 1971), as shown in the original report, are the “eared” variants. While these observations may indicate absolutely nothing in the absence of a more detailed analysis, they do support the speculation that more than one group of people were involved in the deposition of the Gorto bifaces, especially in light of the morphological and technological variation represented, as well as the greater quantity of finished bifaces compared to the above mentioned sites.

While this data and interpretation do not readily reveal social organization or kinship structure, they do seem to indicate somewhat distinct yet overlapping communities of technical practice; that is, groups that were involved in the same *habitus* of technical production—sharing in the same aspects of technical knowledge, gestures, and meanings which undoubtedly arose within a shared field of discourse and experience. If it can be assumed that the observed differences in technical

production point to divergent, yet closely affiliated, communities of technical practice, it would be reasonable to conclude that these communities were based on social relatedness; that is, they were most likely members of the same social unit.

I contend here that it matters little whether the individuals involved in deposition of the bifacial tools at the Gorto site were related affinally or consanguinially, because if they were involved in the same community of technical practice, they were most likely part of the intersubjective construction of *habitus* that occurred through individual production in socially mediated circumstances (Dietler and Herbich 1998; Pfaffenberger 1999). The explanation from parsimony and analogy (as discussed previously) is a type of social organization based on the band unit. If it can be assumed that the boreal forest environment limited (but did not determine) the type of foraging strategy appropriate in these circumstances, and that this in turn structured the feasible mode of production (generalized foraging) for the Paleoindian-Archaic peoples of the Northwestern Great Lakes region, then a highly fluid band structure of social organization seems obvious. If this argument can be carried one step further, it might be assumed that the mode of production in this social and environmental setting necessitated the fragmentation of the larger band in certain seasons or circumstances. Perhaps through this scenario, the social context of the Gorto site, in accord with the material culture present, begins to emerge. Namely, if disparate, yet related communities of practice, interpreted here as correlating with the practiced mode of social organization, deposited their material items at one point in time and space, the material record should reflect those social aspects in technological residuum.

What I contend here is that the material culture of the Gorto site reflects

interacting communities of technical practice, and hence, social communities. As I maintain that the bifacial tools of this collection were manufactured and deposited by different individuals, yet represent patterned production techniques that reflect distinct communities of practice, there appear to be at least two major groups responsible for the manufacture of the majority of bifacial implements in the collection. Based on technological similarities in production, which are obstinately intertwined with the morphology of tool attributes, the two groups of tools are represented by those that display the "expanding stem," and those that are of the "eared" variety. These morphologies are of course, approximated mainly by the production techniques utilized to manufacture them. While there is certainly variation within these "groups," as would be expected, the general patterns of production, although slight, result in productively similar yet distinct morphological forms (in haft shape). Unfortunately, the sample size is entirely too small to detect any statistically significant and reliable measure of difference between the linear dimensions of these two forms.

Some of the bifacial tools discussed do not seem to follow the general production trajectories described in Figure 7 or the above text. These include the "notched" Archaic biface and the other "expanded stem" forms that display a similar morphology (see Figure 5 (d), Figure 6 (c), (d), and (e)). As previously discussed, one attribute of the Subarctic analogues for the Interregnum peoples of the Northwestern Great Lakes was the general fluidity of social boundaries and band membership from year to year. It would be expected in a social unit with fluid social boundaries in terms of group membership, that the phenomenological reflection of this dynamic would be relatively stable patterns of production for a certain quantity of

the cultural material items, with the addition of cultural objects that do not seem to fit the dominant patterns of production. Of course, within certain social contexts, such as that of ritual gathering or social aggregations of smaller social units, this patterning would be more apparent. What follows from this is the conclusion that individuals occupy multiple positions of social membership through life and this phenomenon would be reflected in material culture (Sassaman and Rudolphi 2001).

The phenomenon of exaggerated attributes, such as those demonstrated by the points in Figures 6 (c) and (e), may be expected in a context in which the participants in ritual could potentially objectify the products of other individuals (Handler 1988). The point is that the exaggerated products, might tend to “make up”—overcompensate—for the “normal” or the expected way that cultural objects are produced; exaggerated products adhere in exaggerated ways, in other words, to *doxa*—the unmentioned, naturalized, or expected protocol for producing the object of expectation through durable dispositions in a cultural context, determined by a recursive relationship between agency and structure. Of course, a participant’s perception of cultural objectification and political posturing under the circumstances of ritual may also contribute. Nowhere else is this—the articulation of sameness or difference—perhaps more clear than in the context of ritual (Turner 1967; Nassaney 1989).

Although a few cases do not make a rule, in this particular case the available data suggest a pattern of material culture production that may well illustrate the dynamic of social relationships extant in the Northwestern Great Lakes Interregnum. Also, these aspects of point morphology are not elucidated by linear measures alone, but were initially recognized by qualitative differences in the final stages of



biface production; the linear measures, while supporting a secondary line of evidence, are in fact secondary, resulting in turn from the very methods of production from which they were produced by human agents. If it can be assumed that these “aberrant” points (Figure 6) were manufactured by individuals whose primary social community lay outside of the context that existed during the time that the Gorto site was created, or that they are associated with the discrete communities of practice that have been suggested, an interesting pattern of social organization is suggested by the material culture variation.

### The Social Context of the Gorto Site

The ritual complex in the Northwestern Great Lakes during the Paleoindian-Archaic transitional period provides a unique glimpse into the way material culture is mediated by the social, and the social, in turn, is mediated by the material. Provided that many individuals contributed the objects of their labor—which is not unreasonable to conclude for a domestic mode of production—the material patterning involved suggests a reflection of the political and social order, and perhaps, through ritual, its objectification (Handler 1988). What is represented may be a model of the political and social order (Geertz 1973) reflected through the deposition of material goods. The social arena of ritual provides opportunities for objectification of not only material culture, but also the socially constructed fields of meaning, allowing participants to examine the basis of their shared worldview (Ortner 1978).

Mason (1981) has speculated on the social context of the Renier site in

Wisconsin, proposing that the individual cremated and interred there was placed upon a pile of wood along with the material items (and perhaps others) that would eventually be recovered millennia later. The Gorto site may or may not be a mortuary site, as not every Northwestern Great Lakes context similar to the Gorto site contains evidence of human interment, although they all seem to suggest some form of ritual behavior. Burial may have been but one aspect of the ritual composition practiced by these people within the larger meaning of the overall ritual context and action. Of course, the lack of evidence of human interment does not necessarily indicate a non-mortuary context either, as the generally acidic soils of the Upper Great Lakes are notorious for the rapid deterioration of organic material. Regardless, a mortuary context is not imperative for the enactment of ritual, and with it, the objectification of the social and political order. What seems clear is that a deposition of material objects was carried out through intense exposure to fire and that the remains of these objects may reflect the reproduction, maintenance, or contestation of the social and political order through the material culture items that were recovered from the site.

What these Northwestern Great Lakes ritual and mortuary sites may invariably represent are the gathering places of social units that were otherwise inhabiting and subsisting in other areas—smaller family units or bands that occupied adjacent territories which were required by environmental limitations to practice a high degree of mobility in a generalized foraging economy, and who came together within the larger band aggregate during certain seasons to perform certain social functions. Under the ethnographic analogy that I have imposed, as well as from what is inferred about Paleoindian settlement/subsistence strategies in the region,

this scenario seems likely, as represented by patterned material culture differences. Therefore, I would interpret the Gorto site as such a group aggregation area, and perhaps by default, other sites that are similar in context. While I have only discussed the bifacial tools found within one feature at the Gorto site, other items recovered from material concentrations adjacent to the feature area may bear this out in future analyses.

Material culture in this social context, while reflecting the practice of particular communities, may have also been interpreted by the social agents involved as a representation of the functioning social and political order. In the Paleoindian-Archaic cultural Interregnum, groups of unrelated persons—Archaic peoples from the south who were slowly following the floral and faunal communities northward— were likely coming into contact with those that already occupied the Northwestern Great Lakes. As the practiced form of social organization and social structure likely consisted of fairly loosely affiliated bands and dynamic band membership within the boreal forest of the Northwestern Great Lakes, this very social structure may have readily absorbed individuals from disparate groups. The material culture at the Gorto site also seems to bear this out, as a typically Archaic tradition side-notched point was recovered along with bifacial implements that displayed both Cody Complex traits, and traits that are generally not associated with Late Paleoindian technological practices. These objects were also recovered within a single non-stratified feature. In fact, similar phenomenon at Renier and other sites with an Interregnum context suggest the plausibility of this interpretation. Mason and Irwin (1960) also suggest a “culture contact” association at the Renier site.

I would suggest that not only were the makers of the Archaic points at these

sites in contact with the Late Paleoindian peoples, but perhaps shared in ritual activity, revealing what may have been a similar worldview in terms of cultural ideology. In fact, as previously mentioned, there is little to suggest that the lifeways of Late Paleoindian and Archaic groups in the Northwestern Great Lakes were dissimilar (Kuehn 1998), as they have been presented in the literature. If subsistence and settlement practices were similar, in accord with a shared cultural ideology or worldview, there seems little archaeologically that can separate the two social entities into different “ethnic” categories in the Northwestern Great Lakes region—except of course the divergent technological practices, and even these, as has been shown, overlap significantly in technical execution. What the ritual context of these sites suggest, is that in this particular context, aspects of social difference may not have come into play; that is, the individuals involved may not have utilized the structural content of social difference to demarcate ethnic groups in this particular field of social practice—a point that is discussed below.

In a constantly changing field of social identity and band membership, it would be expected that material culture items would be somewhat heterogeneous in morphological attributes and production techniques. This, of course, is what the patterning of production techniques suggests for the Gorto site. In a situation where members of various social units could aggregate and deposit items of material culture at one point in space and time, the expected outcome would be general patterns of technological practice followed by divergent practices in a minority of instances—in this case, the aberrant bifacial tools shown in Figures 5 and 6 (and the Archaic form in A.5). In terms of a constantly changing political and social order, brought about by shifting alliances and band memberships, the objectification of the

social order through ritual and deposition of material belongings would provide a social examination of that order. What the material items would surely reflect are the dynamics of identity among individuals, as their particular technological products would reflect multiple intersections of group identity (with little probability of tracing them archaeologically) in the production techniques and attributes that these products display. It is as if the particular and unique context of the Gorto site—or the ritual activity in general—provided an arena in which many different individual experiences and positions intersected within the same *habitus*—that of worldview. What is reflected in material culture may indicate ethnic difference in object attribute alone, yet perhaps does not carry over into the circumstances of ritual activity.

What I would suggest, concerning the intersection of style, ethnicity, and social practice within the context of the Gorto site, is that multiple and various forms of ethnicity may have been active within the social context that took place at the site. Rather than attribute the divergent forms of material culture as represented by bifacial tools to divergent indigenous forms of ethnicity, I would locate these material manifestations in overlapping fields of social and individual identity; that is, material differences may not correspond effortlessly to ethnic differences in this case. Neither do they need to for the sake of interpretation. If band structure in this Late Paleoindian-Early Archaic cultural context in the Northwestern Great Lakes was permeable enough to include individuals from the “fringes” of the social and geographic core—those distant enough to practice quite divergent forms of technological practice, learned from other communities of technical practice—within the structure of social organization, then there is no need to attribute material culture difference to ethnic difference. The inclusion of divergent material forms (which are

invariably reflected in a significant number of the Gorto assemblage bifaces through Archaic biface "attributes") in the social arena of inferred ritual would seem to imply interpersonal interaction of individuals from what may have been dissimilar social spheres, yet participating in the manifestation of an encompassing worldview. However, this shared worldview may, or may not, correspond to ethnic similarity.

Based on shared production techniques as assessed through the material remains of the Gorto site, groups that were in close contact, yet somewhat divergent in terms of technological practice, were perhaps responsible for the deposition of social artifacts there. In viewing the inferred and plausible means of social organization in the type of environment that likely existed at the Gorto site during the time of cultural activity, it is possible that multiple, smaller sub-band groups or factions could have deposited the bifacial tools at the same time. I would defer from implying multiple and actual bands on the grounds that the totality of bifacial forms at the site is not great enough in number to suggest a larger aggregation of people.

The former suggestion of a multi-faction band—such as that in operation in the Subarctic groups of Eastern Canada—would seem plausible on the grounds that this form of social organization has been demonstrated for hunters/gatherers in a boreal forest environment. This type of social organization also seems to be suggested by the type of variation extant in the Gorto collection bifaces—that of patterned "groups" of techniques, or what I have interpreted to be the manifestation of related communities of technical practice. This need not have been distinct "lodge groups," as was the case of social organization for the Canadian Subarctic groups, but a social organization and social structure that would have unreservedly accepted individual "Others"—those outside the everyday community—into the social

organization and structure, while maintaining the overall band organization. A type of "factioned" band like those observed in Innu society seems to fit well with this interpretation.

CHAPTER VIII  
STYLE, ETHNICITY, MATERIAL CULTURE, AND PRACTICE: SUMMARY AND  
CONCLUSIONS

I began this text by stating the basic research question: what does the degree and kind of “stylistic” diversity that occurs in the Paleoindian-Archaic Gorto site assemblage imply socially? In order to address this, I analyzed the bifacial lithic tools that were found in the site's main feature. This analysis included assessment of the production trajectories involved in the artifact “types,” mainly through examining the sequence of flake reduction in the basal elements of the bifacial tools. The results of quantitative and qualitative analysis indicate that although there is some grounds for separating the “eared” versus “expanded stem” forms based on overall basal morphology, this generally does not hold when the production trajectories are closely examined. In all, the two point “types” are more similar than different, indicating that the agents that carried out production of the implements were perhaps involved in related communities of technical practice.

What I hoped to have demonstrated from this work is that style, ethnicity, and material culture can be interpreted in a way divergent from a systems-centered approach. More precisely, these archaeological concepts—style, ethnicity, and material culture—must be assessed within and through the overarching concept of the agent: those peoples responsible for the manufacture and deposition of what we refer to as the archaeological record. It is through the historical agent that style, ethnicity, and the technological practices that produce material culture both merge and emerge. And yet, how that agent contributes to social structure is also



important. Both must be understood dialectically before the aforementioned concepts can be evaluated.

Although many theoretical paradigms have influenced my interpretation of the particular record that I have reviewed, I chose to examine the material culture of the Gorto site—a Late Paleoindian-Early Archaic cultural context—through my interpretation of practice theory as outlined by Bourdieu (1977; 1990). The material culture from the Gorto site is a rich record of the social and cultural intersection of technical practice, material style, and ethnicity. I hope to have demonstrated that although these concepts can be viewed separately, they are best employed through what may be determined from the lived experience of social agents. For while we as archaeologists can attempt to impose abstract models upon the data through conceptualizations of style, ethnicity, and practice, we may be ignoring the residua of the extinct social contexts that brought the social world of historical agents into being. That is, through structure and agency, social agents create the models by which they live, and this is likewise reflected in the products they produce through technical practice, in what is considered stylistic, and how ethnicity is conceptualized. The Gorto site provides a somewhat unique context to examine these concepts, as it occupies a transitional period in the chronology of North American and Great Lakes archaeology, provides a material assemblage that seems to "mix" stylistic attributes from both periods, and likely was produced as a result of ritual behavior.

The material phenomenon known as the Scottsbluff tradition lasted for nearly 500 years on the Plains of the American West, perhaps longer in the emerging Eastern Woodlands. The material culture items recovered from the Gorto site are clearly associated with this cultural tradition. Whether representing the last cultural

manifestations of the Late Paleoindian groups occupying the Northwestern Great Lakes or the emergence of but one tool tradition to follow the area's first occupants, the material from the site may never be definitively dated. It is perhaps certain that as archaeologists what we have come to view as an enduring stylistic biface production technique on the Great Plains lasted comparably longer in the Eastern Woodlands.

From a social viewpoint, the longer duration of this technology has many implications. While it could be argued in many forms that what is represented in the archaeological record existed and endured in the past because of its technological functionality, I would align with a different viewpoint: that of a phenomenological conceptualization of technology in which "people, their relationships, productive activities, meaning, and the material world [are woven into] a single, indivisible whole" (Dobres and Hoffman 2000: 131). Through this view of technology, what seems most interesting is not that the technology itself endured over many consecutive generations, vast geographical spaces, and varying environments, but that quite possibly the intersubjective meaning and articulation of a particular durable disposition to manufacture a tool form in a certain way survived throughout generations of changing, dynamic, and negotiated social contexts. This is also perhaps reflected in the technological variation of Gorto site bifaces.

By relating differences in material culture to differences in ethnic affinity, we are perhaps creating ethnic groups and boundaries in the past that did not exist. In interpreting contexts from the Northwestern Great Lakes during the Paleoindian-Archaic Interregnum, this process has primarily been based on a few sites in accord with the establishment of "phases" and "complexes" as a primary

entrance into the process of establishing culture areas. I would contend that in certain regional and temporal contexts, typologies—both material and cultural—disintegrate unless, of course, they are bolstered by increasingly complex arguments for the sake of classificatory preservation. In Western states, the Paleoindian-Archaic transitional period is also complex (Frison 1978), almost defying the application of typological nomenclature, the establishment of categories like “phase” and “culture,” and with them the very basis of archaeological determination of ethnic differentiation.

The only reasonable solution at present seems to be negating the reification of ethnic entities through typological differences alone and reassessing the concepts of ethnicity and style in terms of practice theory. This would, in effect, place the context of ethnicity and style within the subject of the individual, who in lived experience, is/was situated through time in many structural positions—each affecting the outcome of cultural objects produced. Of course, in terms of *habitus* the affected outcome of technological production is based on the naturalization of the social order and its relations of production, past experiences and political posturing, among other factors—all intersecting in the field of individual identity.

The unique context of the Gorto site has presented an opportunity to assess and interpret what was quite possibly a single activity carried out at one point in time—a context which is not often provided by the archaeological record, as many sites include multiple strata of lived activities and discard. What is also unique to this site is the “mixed,” apparently “ethnic” juxtaposition of tool forms that have (in other sources) been attributed to dissimilar cultures. There were a number of potential ways I could have gone about assessing and interpreting the “mixed” material culture

of the Gorto site. Simply demarcating "cultures" by material culture (projectile point) typologies would have been among the most facile. This method would have entailed classifying the bifacial tools into established typologies and assuming correspondence of the tool forms or types with particular cultural entities. This would have required a homogenous, bounded, reified conceptualization of ethnicity, and a definition of style based on attribute of finished form. It also would have eliminated any active social agent in the record. Instead, I used a conceptualization of style that relies on the active agent: his/her socially positioned role in production, shaped by both the structured rules of culture, and by personal agency. Rather than viewing style *in* objects as an accumulation of etically defined attributes of objects, I pursued the conclusions of a formulation that would include the possible forms of social organization, social relationships, the duration of technologies through the retention, contestation, and negotiation of the intersubjective meanings produced in the social act of material culture production.

The material from the Gorto site does not easily "fit" within the phases and complexes established for the Northwestern Great Lakes region (see Figure 2), which is to be somewhat expected, considering that it may be among the first Late Paleoindian-Early Archaic sites in the region. However, this makes interpreting the cultural, ethnic, and stylistic context of the site especially difficult and speculative.

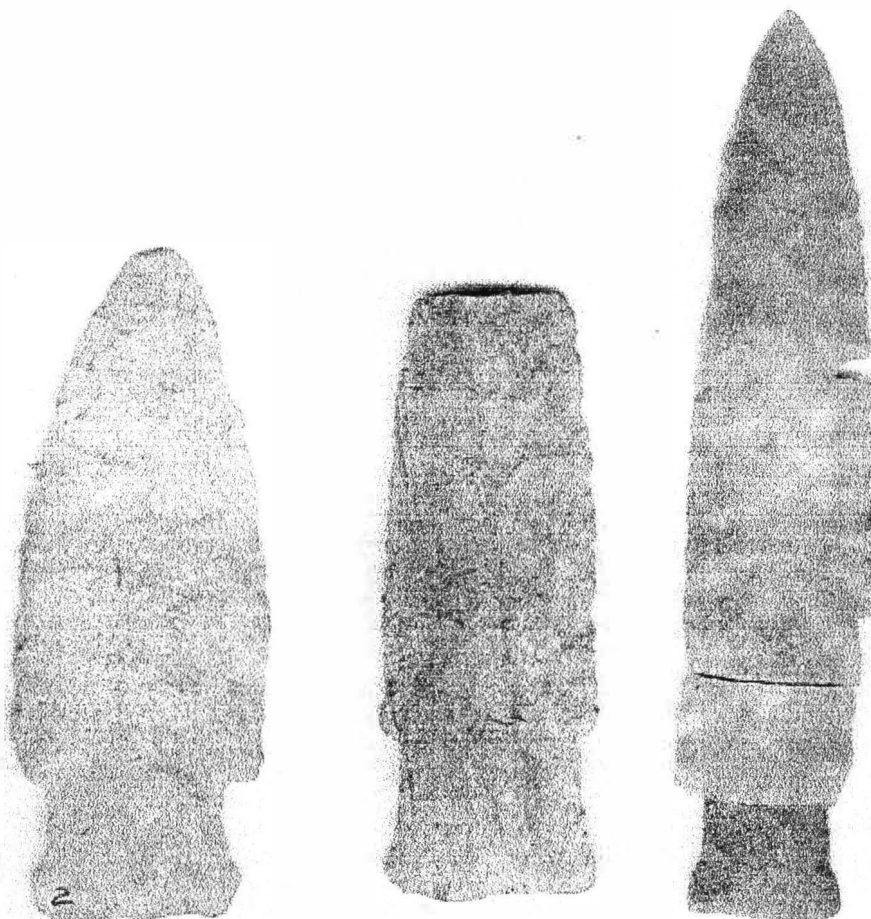
I utilized a conceptualization of ethnicity that also relies on the active roles of both structure and agency. By placing the active historical agent at the center of analysis, their cultural products can be viewed through a different perspective. The kinds of social relationships that may have been included in the production process, the forms of meaning involved being produced and negotiated between agents can

become an active part of the analysis of material objects; a dialectical relationship is formed whereby the technology cannot be separated from the social processes from which it was formed. If these inferred relationships, as facile as social organization, can be included in the hermeneutic of analysis, interpretations of many archaeological contexts which include historical agents, and diverge from systems-centered approaches, can occur.

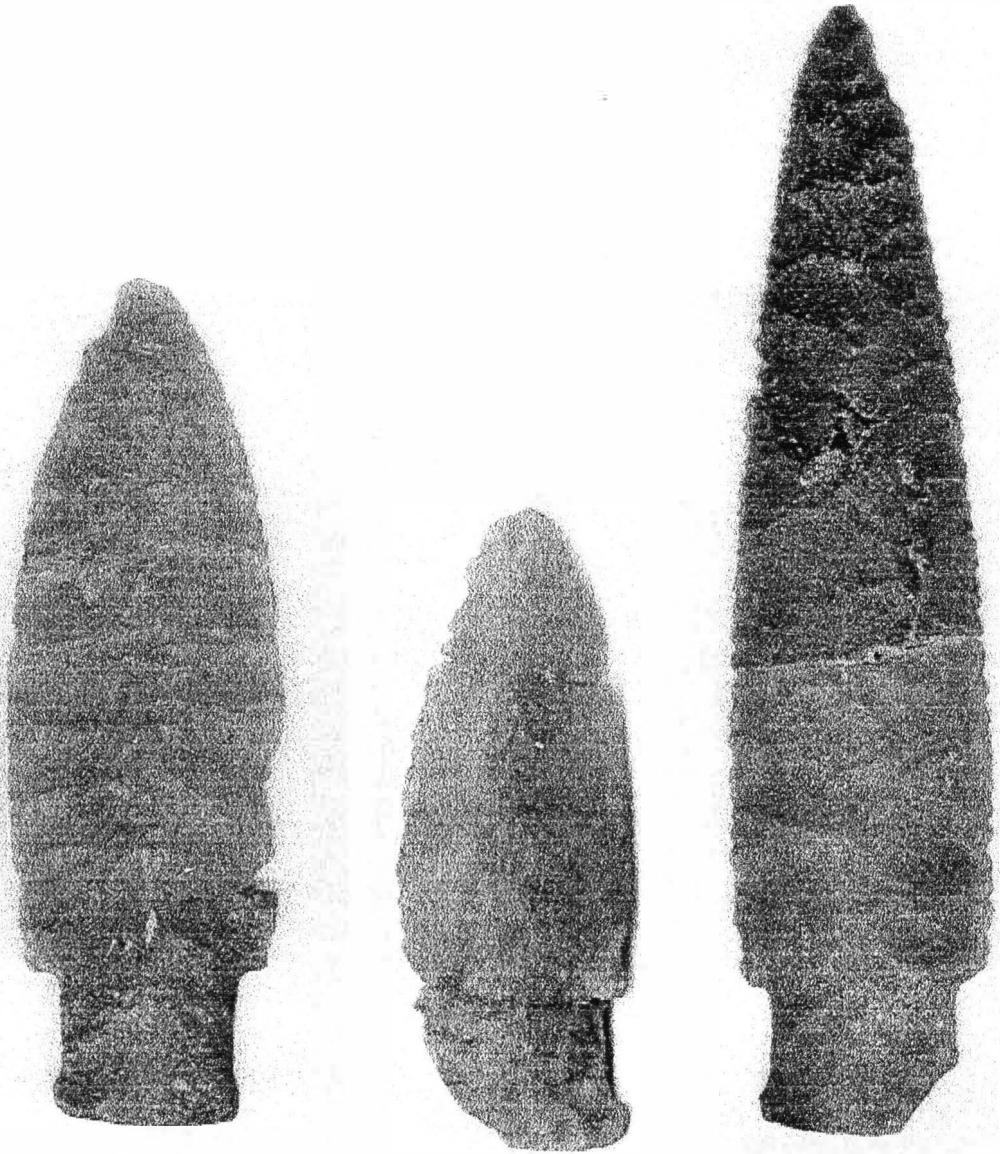
Future studies involving the Interregnum period in the Great Lakes region may need to look at technology in a new way, where the agents involved occupy multiple aspects of identity and social position, yet often belong to distinct communities of practice that maintain a technical *habitus*. Linear comparisons may not be adequate to describe the lithic technologies of this period because they often disregard important aspects of the technological trajectories that were used to create an object. These trajectories show technological choice, divergence, and emic understandings of a particular *habitus*.

I hope to have shown that there are alternative ways of analyzing and interpreting the archaeological record from the Paleoindian-Archaic transition. The use of practice theory is becoming more prominent in both anthropology and archaeology as a result of its transcendent applicability, its ability to synthesize aspects of structure and agency, style and ethnicity, and practice and technology in one theoretical framework. The use of practice theory in interpreting style and ethnicity in the material record does not require systemic, functional (even functionality from an economic viewpoint, as Wobst [1977] has outlined), or standardized means of approaching these concepts, yet provides a flexible theoretical framework that puts agents at the center of interpretation.

Appendix A  
Gorto Site Projectile Point Images

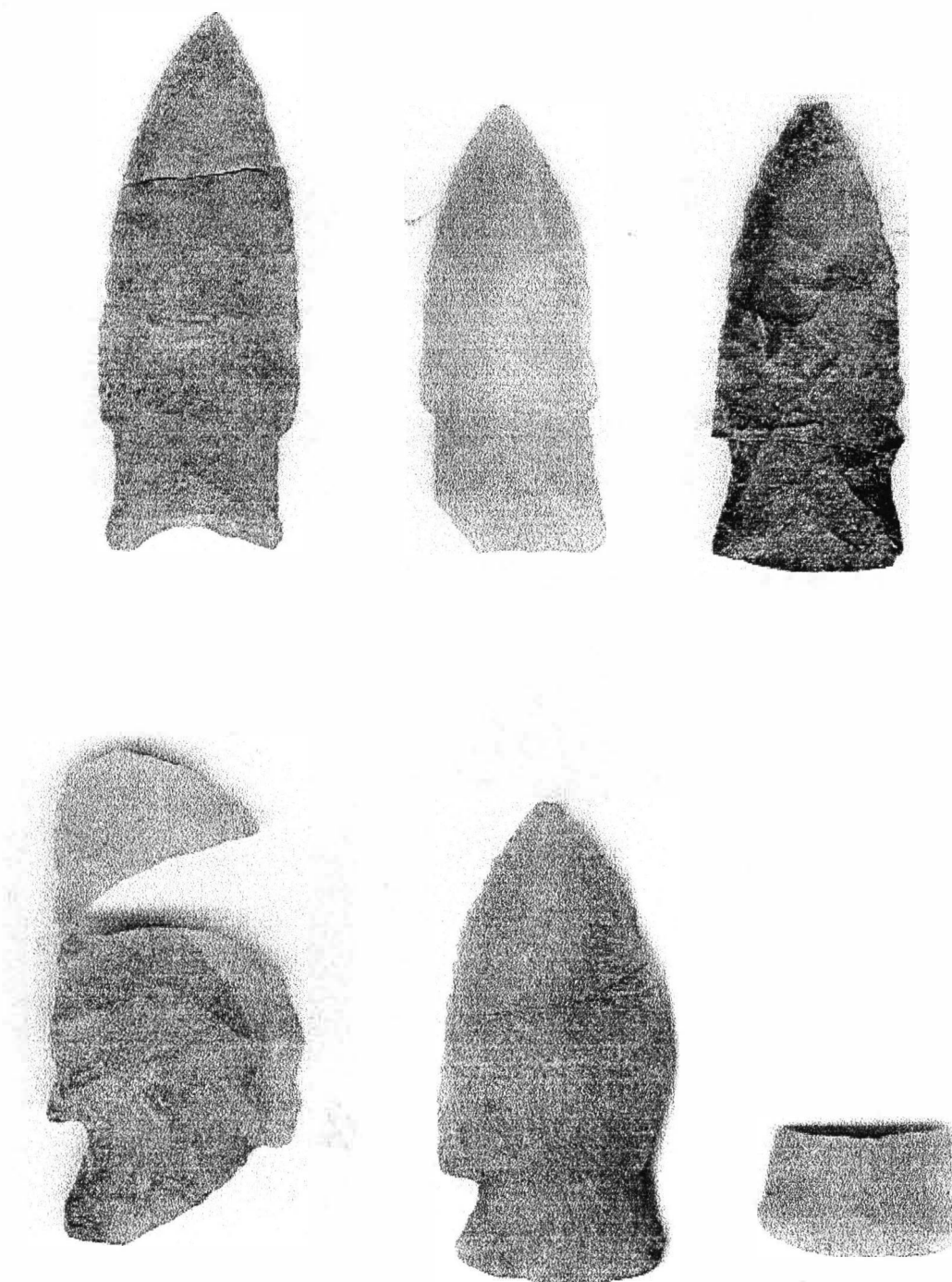


A.1. Bifacial tools corresponding to Figure 4 in text (a, b, c); figures shown actual size.

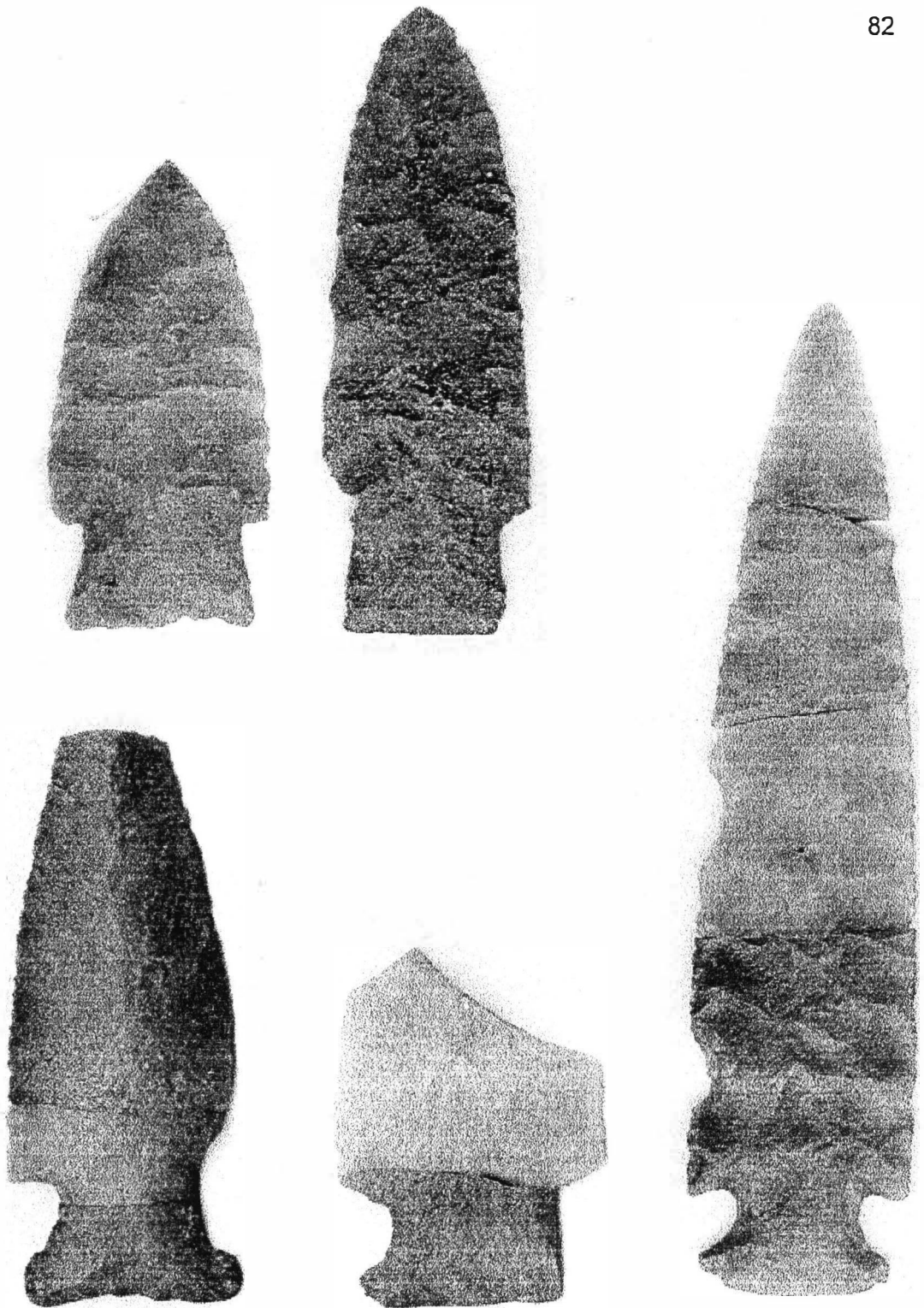


A.2. Bifacial tools corresponding to Figure 4 in text (d, e, f); figures shown actual size.

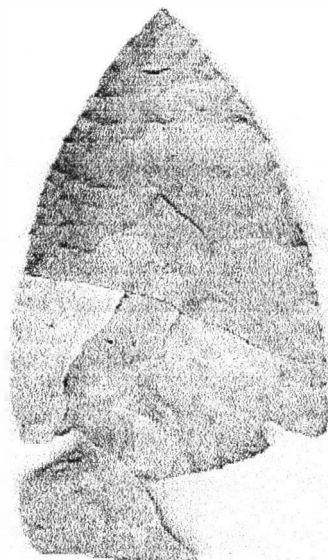




A.3. Bifacial tools corresponding to Figure 5 in text (a, b, c in upper row; d, e, f in bottom row); figures shown actual size.



A.4. Bifacial tools corresponding to Figure 6 in text (a, b, in upper row; c, d, and e in bottom row); figures shown actual size.



A.5. Archaic projectile point from the Gorto site assemblage. Shown actual size; figure not shown in text.

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