POTTERY STYLES AS INDICATORS OF CULTURAL PATTERNS: THE KISIS COMPLEX

A Thesis Submitted to the College of Graduate Studies and Research in Partial Fulfillment of the Requirements for the Degree of Master of Arts in the Department of Anthropology and Archaeology University of Saskatchewan Saskatoon

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ABSTRACT

Our understanding of the precontact history of the boreal forest of northern and, in particular, northwestern Saskatchewan is in its infancy. As such, much of the research conducted in this region often results in the development of new culture histories. Pottery is one of the most useful diagnostic indicators of the communities who lived in the province's forests prior to the arrival of Europeans because of its potential to reflect patterned behaviour and modifications on patterned behaviour. Subsequently, ceramics can also provide information regarding the cultural practices of its makers, particularly as the practices influence the distribution of people across a landscape.

During the Late Woodland period the people who crafted Selkirk composite pottery moved across the Mixedwood Section of the boreal forest of Saskatchewan, settling between the Churchill and Saskatchewan Rivers. Several regional complexes have been identified based, primarily, on stylistic variation in the ceramics with differences also recognized in the lithic, bone and antler industries. This thesis identifies and defines a regionally distinctive pottery style, the Kisis Angled Rim type for the study region, located in the Upper Churchill River basin. This type, while exhibiting traits common to all Selkirk ware,
is characterized by an angular rim which is always decorated, most commonly by fingernail pinching.

The historically known Western Woods Cree, who occupied the boreal forest of Saskatchewan and Manitoba and were felt to be the descendents of the people who made Selkirk ware, lived within marriage isolates, practicing endogamy. The distribution of the Kisis Angular Rim type and its homogenization in the study region compared with other study regions supports the proposition that its makers were engaged in a marriage pattern similar to that of the Western Woods Cree of the eighteenth and nineteenth centuries. Endogamy and the involvement of potters in a marriage isolate is suggested to have restricted the movement of potters (who are felt to be women) out of this region while promoting a high incidence of interaction and communication within the region.
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LIST OF ABBREVIATIONS

B.P. - before present
CWT - cord-wrapped tool
OWP - Old Women's phase
n.d - no date
SBC - Saskatchewan Basin complex
SET - sharp-edged tool
1.0 Introduction

1.1 Introduction

Our understanding of the precontact period of northern Saskatchewan is, at best, in its infancy or just beyond. As such, many of the sites excavated and the artifacts recovered provide new insight into the prehistory of the area, its inhabitants, and their technologies.

The first series of systematic excavations in the study region (Figure 1.1) occurred along the Kisis Channel in response to proposed development by the community of Buffalo Narrows in the early 1980's (Millar 1982). Three sites, deemed significant and in need of mitigation, were the subject of excavation. These were the Martin Chartier site (Gl0c-20), the Bernadette Chartier site (Gl0c-21), and the Ice House site (Gl0c-2) (Figure 1.2). The material recovered from these sites, in particular the pottery of the Late Precontact period, though similar to that from sites situated along the Churchill River in north-central and northeastern Saskatchewan, was sufficiently different and was classified as a regional variant of those industries. While this was an important first step in elucidating the culture history of the region, little follow-up work has been conducted in the ensuing period to
Figure 1.1 Location of study area in Saskatchewan
Figure 1.2 Location of sites examined from Kisis Channel
further refine, define, or refute the initial classifications. The focus of this research, therefore, will be to address the nature of the ceramic industry recovered within the study region, its relationship to other pottery-producing industries within the boreal forest of central Canada, and Saskatchewan in particular, and the cultural practices responsible for the distribution of these ceramics.

1.2 The Upper Churchill River Basin

The project area is located in the Mixedwood Forest section of northern Saskatchewan within the Upper Churchill and Mixedwood Ecodistricts (Harris et al. 1983:4) In Saskatchewan, the Mixedwood Forest section is relatively low in relief, covers a vast territory and occurs primarily in portions of three physiographic regions. These include the Manitoba-Saskatchewan Lowlands, the Saskatchewan Plains, and the Alberta High Plains portion of the Great Plains Province (see Kabzems et al. 1976:9-12 for a complete description). A cold snowy winter and short cool summers characterizes the climate, and the moisture region is of the dry subhumid type (Richards and Fung 1969:52). This region, along the southern edge of the Precambrian Shield, is typified by deeper soils than north of the Churchill River system. It has a richer mixedwood forest of conifers and broad leaf trees on podzolic (tree litter) soils (Richards and Fung 1969:74). These rich stands of
deciduous hardwoods and coniferous softwoods make the area attractive for the lumber and pulp industry (Kabzems et al. 1976:21).

The Kisis Channel is a main focus of this study due to the high concentration of sites along its borders - over 20 sites have been identified along the peninsula forming its eastern border alone. It is a deep, 2.5 km long, S-shaped channel which connects Little Peter Pond Lake to Churchill Lake. The surrounding terrain is low and fairly flat, with muskeg supporting black spruce and tamarack, while better drained grey wooded sandy soils maintain stands of white poplar, white spruce and paper birch on higher areas (Meyer 1977:3). The eastern peninsula of the Kisis Channel, which juts into Churchill Lake across from the village of Buffalo Narrows, is covered by trembling aspen, willow, birch, and jack pine, with an understory of willow and blueberry bushes, moss and Labrador Tea. The low plain along the channel edge, which periodically undergoes flooding, is covered with grass along with willow, alder, birch and understory species (Millar 1983:29).

The channel is one of the last sections of the lakes to freeze in winter and may, in some years, stay open throughout the cold season due to its strong current (Rollans 1992:4). As Millar (1983:29) has outlined, pike, pickerel and lake trout use the channel to migrate to their spawning grounds and people have long taken advantage of this natural "funnel" for exploiting these resources. The
open water is also attractive to many mammal and bird species, ranging from bear to hare and goose to grouse. This area, and "specifically the channel, were strategically located for human occupation during both prehistoric and early historic times" (Millar 1983:1).

1.3 Culture History of the Buffalo Narrows Region

1.3.1 Paleoenvironment

While the general topography of the region has remained relatively unchanged in the last several millennia, the vegetation and faunal communities have seen considerable transformations. Following deglaciation, a periglacial tundra existed until approximately 8 000 years before present (B.P.), being replaced by a primitive spruce-dominated boreal forest, as suggested through pollen core analysis (Ritchie 1976:1812). These early postglacial environments may have supported megafauna such as mammoth, horse, camel, large bison, and muskox if recoveries from nearby northern Alberta can be correlated with the area in question (Millar and Ross 1982:8-9).

Between 6 000 and 7 000 years B.P., as a result of a warming and drying trend known as the Altithermal or Atlantic climatic period (Epp 1991:22) the spruce forest and grasslands shifted north of its present position. Then, at approximately 3 000 years B.P. environmental conditions moderated and the vegetation developed into a mixed-wood forest community made up of spruce, pine, birch,
and poplar which, in essence, reflects the coniferous-deciduous forest of today (Millar and Ross 1982:9). Relatively little change has occurred in the landscape, fauna, and floral communities in the last 3,000 years.

1.3.2 Cultural Sequence

The earliest time period represented in the study area, the Plano tradition, is represented by a number of surface collected lanceolate points resembling Agate Basin, Plainview or Angostura forms. These materials are thought to date between 6,000 and 8,000 years B.P. (Rollans 1992:7). The Middle Prehistoric period is represented by surface collected early side-notched, Oxbow and Pelican Lake/Corner-Notched points (Millar and Ross 1982:40). The presence of these cultural traditions relates to the time when the grasslands extended much farther north than they do now.

The Late Precontact period in the north, from roughly 2,500 years B.P. to the time of contact, represents the most intensive utilization of the region. Between 2,500 and 800 years B.P., peoples who produced Taltheilei tradition implements moved into the area (Millar and Ross 1982:40-41). The people utilizing Taltheilei technology are felt to be ancestral to the modern day Dene peoples (Wright 1976:97; Gordon: 1975:104-105). Millar (1983:94) described the technology of the Chartier complex (which he considered to be of Taltheilei affiliation), recognized at sites Gl0c-
20 and Gl0c-21, as containing medium-large lithic lanceolate bipoints, an absence of any ceramics, a low frequency of bifaces, scrapers, and bipolar technology, with a prominent usage of white vein quartz as seen in large crude flakes. A date of 1275 +/- 75 radiocarbon years B.P. (calibrated between 1320 to 1050 years B.P. at two sigma [Morlan 1993:35]) was produced for this assemblage at the Martin Chartier site. Based on projectile point morphology, it appears the Early, Middle and Late periods of the Taltheilei tradition are represented at the Ice House site (Gl0c-2), the South Big Hill site (Gl0c-24), the North Big Hill site (Gl0c-31) the Old Beach site (Gl0c-30) (Millar and Ross 1982:40, 133-137) and at the McCusker Lake site (Gh0e-1) in the form of stemmed and side-notched points (Millar and Ross 1982:40, 133-137).

The Selkirk composite is the latest archaeological entity represented in the region, and it is felt that the people responsible for these remains were ancestral to the Western Woodland Cree. Ceramics from a multitude of sites are suggestive of Late Woodland technology, which conforms quite closely to the Clearwater Lake complex (Millar and Ross 1982:40) dating approximately A.D. 1300-1700. In fact, these "are the most numerous prehistoric occupation components on the peninsula" (Millar and Ross 1982:40), and based on "the controlled survey done to date it is possible
that important sites will be found at any point along the channel" (Millar and Ross 1982:42-43).

It does not appear that this is the only type of ceramic remains found along the peninsula; there are several pieces of pottery which do not conform to Selkirk ware ceramics. In fact, these articles, along with several side-notched projectile points, are thought to reflect the late precontact period on the northern plains, in particular the Old Women's phase (Millar and Ross 1982:41, 52). This dates from A.D. 800-1300 in southern Saskatchewan, A.D. 800-1750 in Alberta, Montana, and perhaps west-central Saskatchewan (Greg 1985:131; Meyer 1988:57-63).

1.4 The Selkirk Composite and the Kisis Complex: An Overview

The Selkirk composite is an archaeological construct composed of assemblages extending from northwestern Ontario, through to the northwestern portion of Saskatchewan. A composite is a high level of taxonomic classification which is made up of a number of complexes. Complexes share a set of technological and stylistic traits which are sufficiently similar to indicate a common and recent ancestry but "sufficiently different [to suggest] that microevolutionary changes have taken place" (Syms 1977:71). The Selkirk composite, then, is represented by several regional complexes which all share a set of core
features, but are differentiated on the basis of variations built around this core set. The different complexes, which date from ca. A.D. 1300 to A.D. 1700, identified at present include the Clearwater Lake, Grass River, Kame Hills, Pehonan, and Kisis complexes (Figure 1.3). The differences between complexes include vessel morphological and decorative differences, and frequency differences of these traits, in the pottery assemblages.

At present, the Kisis complex is the most westerly representation of the Selkirk composite. The ceramic variability which initially brought attention to these pottery bearing assemblages in the Buffalo Narrows region, and the presence of plains-like attributes or even plains-related materials, will provide the focus of this study.

The Kisis complex was initially defined based on the pottery found at these sites. However, Millar and Ross (1982:51) felt it was subsumed by the Clearwater Lake "phase", and did not recognize it as a taxonomic unit unto itself. Meyer and Russell (1987) subsequently proposed that the Kisis complex represented a regionally distinct ceramic technology in comparison to the Clearwater Lake complex and those found in other regions of the boreal forest in Saskatchewan. In so doing they employed Syms' (1977:70-71) taxonomic system. While Millar was correct to assume that the ceramics did exhibit a relationship with the Clearwater Lake phase (now 'complex') there were
Figure 1.3  Complexes recognized in the Selkirk Composite
differences significant enough to separate them from the aforementioned unit.

The recognition of morphological and decorative variability between regionally related assemblages has been the impetus for classifying Selkirk ware assemblages as alternative expressions on a common theme. Uniting these regional, but related, expressions of Selkirk composite pottery is Selkirk ware, a pottery with a smoothed textile-impressed exterior, generally quite thin walls, paste which is often laminated with a tendency to exfoliate, and tempered with grit. In addition, the Clearwater Lake Punctate type of pottery vessel (Figure 1.4) is commonly found in Selkirk components. As Meyer (1984:45) has suggested, however,

...the dominance of Clearwater Lake Punctate pottery does not automatically make...a Clearwater Lake [complex] assemblage. In large part the various complexes of the Selkirk composite share the same ceramic types although each usually has its distinctive types as well. The shared types usually occur in differing frequencies from one complex to the next.

The basis for the designation of the Kisis complex was the presence of certain decorative attributes and vessel shapes which occurred more frequently than in other, related complexes. The traits of interest include a vessel form with a sharply inflected rim angle, the presence of decoration on the latter rim angles, and the application of grit temper on the exterior surface of vessels. The
Figure 1.4  Clearwater Lake Punctate type vessel
presence, as well, of ceramic types characteristic of other Selkirk complexes indicates the connection between this pottery making tradition and that to the east and south in the boreal forest of northern Saskatchewan. The large collection of pottery recovered from the Ice House site has provided the most data to date regarding the ceramic technology of the Kisis complex.

1.5 History of Archaeological Research in the Study Area

While the study region on the whole is still relatively unknown, archaeologically the Kisis Channel has received a considerable amount of survey and excavation. The materials recovered, which have come from testing programs, surface surveys, and personal collections, provide evidence for human occupation along the channel dating from Late Plano times, approximately 6000 to 8000 years B.P. to the historic trade period (Millar 1982:39).

Anthony Ranere and Gilbert Watson first recognized the channel's archaeological significance in 1964 while surveying the Buffalo Narrows locale under the auspices of the Saskatchewan Museum of Natural History. Four sites were located, two within the village of Buffalo Narrows (the Mission site [G10c-1], and the Nodstrom site [G10c-4]), one in a garden on the west side of Kisis Channel (the Halverson site [G10c-3]), and the fourth on the northern tip of the eastern peninsula of Kisis Channel (the Ice
House site [Gl0c-2]) (Meyer 1977:5). Their recoveries included fur trade period materials, undiagnostic precontact lithic artifacts, and Selkirk ware ceramics.

Meyer conducted a survey of the same region in 1977, in response to a proposal to build a causeway and bridge to span the Kisis Channel. Four additional sites were added to the inventory begun by Ranere and Watson (Meyer 1977:5-6). These were the Cranberry (Gl0c-5), Narrows (Gl0c-6), Route A (Gl0c-7) and the Kisis Channel sites (Gl0c-8). None of the recoveries from the sites were diagnostic (Meyer 1977:13-15). However, based on this and the previous survey, Meyer (1977:16) made "the conclusion that the area about Kisis Channel was an important camping place during both the historic and the prehistoric periods". In addition, he (Meyer 1977:17) recognized that "[t]he fact that Clearwater Lake Punctate pottery occurs in the Buffalo Narrows region is significant since this is, at present, the most westerly known extent of the occurrence of this pottery in northern Saskatchewan".

The most complete archaeological survey of the Kisis Channel was undertaken by James Millar in 1981 in response to "a three phased program of land development...projected for the two opposing peninsular areas bordering Kisis Channel to the south of the present town of Buffalo Narrows" (Millar 1982:2-3). This program would have led to the development of serviced building plots which would ultimately have produced fairly extensive terrain
disturbance. This survey and testing program resulted in the discovery of 25 additional sites (1982:36), with the recommendation to preserve or excavate three important sites: the Martin Chartier site (G10c-20), the Bernadette Chartier site (G10c-21), and the Ice House site (G10c-2). The Martin Chartier and Bernadette Chartier sites underwent excavation in 1982, with over 60 m² excavated between the two. The proposed development was not undertaken and the remainder of the cultural components are still intact.

Once completed, Millar (1983:113) noted that the ceramic assemblage included pots typical of Selkirk ware as well as ceramics which exhibited some plains-like qualities. However, while the latter ceramics, which were part of a group of materials which he labelled the Narrows Assemblage, were reminiscent of the plains, the associated lithic artifacts, features, faunal materials, and the site organization were characteristic of the boreal forest. This relationship has been begging clarification, and it was projected that "further study may show that the 'plains' characteristics may be overlays, that the ceramics, point styles and other attributes resulted from acculturative influences from the plains" (Millar 1983:113-114). The excavations conducted by Scanlon (n.d-a; n.d-c; n.d-d) between 1983 and 1985 at the Ice House site were intended to provide much of this clarification.

It was the recovery of ceramics and projectile points from the Ice House site during the 1981 survey which
prompted the initial proposal of a plains tradition in the region (Millar and Ross 1982:50-52). Scanlon (n.d-b) also encountered similar materials when she expanded testing and excavation at this site, as well as covarying morphological and decorative traits which had not previously been described for Selkirk ware. However, a major problem has arisen, prohibiting a fuller interpretation of these archaeological resources. Records which correspond to the artifacts Scanlon recovered from the Ice House site have been lost or misplaced, and no report was ever prepared on the recoveries. Information regarding context, association, and stratigraphy at the site is nonexistent.

In 1991, Western Heritage Services Inc. of Saskatoon undertook a research/public education program at the Ice House site which increased the ceramic sample for the site and region. While not providing any new variation, a large number of artifacts, ceramic and otherwise, were salvaged from a site under siege from large scale pothunting.

1.6 Research Design

This research will propose an expanded definition of northern Saskatchewan Selkirk composite ceramics and an identification of intra-regional, and possibly inter-regional interaction between Late Woodland/Late Plains Woodland peoples. Because the Western Woodland Cree have been postulated for several decades as the descendants of the people responsible for making Selkirk ware pottery, the
focus of this research will be to interpret the presence and distribution of ceramics with regard to the social systems utilized by the Cree.

The sample which formed the basis for the definition of Kisis complex pottery was very small, and subsequent research on pottery from the area was either not finished (i.e. that by Virginia Scanlon), or was not comprehensive in nature. Thus, a systematic classification or review of the pottery was never produced and the definition of the complex remained very tentative and fragmented. Additionally, ceramics with an underlying plains-like quality recovered from Kisis Channel sites (Millar 1983:108, 113) were not systematically investigated. By studying the ceramics recovered by Millar, Millar and Ross, and Scanlon, and those recently recovered from the Ice House site as a whole it will be possible to validate or modify the original definition of the Kisis complex and the Narrows assemblage. A clarification of the relationship between the Kisis complex and the Selkirk composite, and between the Narrows assemblage and plains pottery-making groups will also be conducted.

These descriptions are meant to provide a general understanding of the range of variation for ceramics in a poorly known region. The types which have been set up must be seen as arbitrary, subject to modification or deletion depending on the research problem (Hill and Evans 1972) and as the data base grows. In providing an initial
description, these types serve to identify technologies and place them in time and space. The description of traits and types is comparable to that followed in ceramic research in other regions of the boreal forest. The most common traits used to describe and to set up types relate to vessel form and decoration (e.g. Hlady 1971; Meyer 1978a, 1978b, 1981; Syms 1977).

Covariation of traits is indicative of patterned behaviour. By studying variability of trait presence and covariation in a regional focus it is felt that inferences can be made regarding population fissioning, social patterning, and stylistic modification. Regional variability in material culture is an expression of potters operating in different social and spatial environments.

The description and classification of ceramic materials which relate to the Selkirk composite from the study region will be the primary focus of this research with the express purpose to explain their presence through marriage patterns and population dynamics. Secondarily, an attempt to elucidate the nature of the non-Selkirk ware ceramics from the study region will be addressed. Over sixty vessels were analyzed, representing nearly the entire ceramic collection for the region. These materials were compared to pottery from outside the immediate study area in order to understand the regional distribution of wares, types and frequencies of types in different assemblages.
1.7 Summary

Ceramic recoveries from several sites in the study area have prompted the recognition of a previously undescribed complex of the Selkirk composite, a geographically extensive Late Woodland archaeological entity. While a description and classification of the Selkirk ware ceramics is the initial focus of this work, an extrapolation from artifact to social system will be attempted. More precisely, it is proposed that ceramics, the development or fluorescence of particular traits, and their distribution can provide insight into how people distributed themselves over the landscape and what mechanisms influenced this movement. It is felt that marriage patterns, and in particular endogamy as it relates to hunter-gatherer groups, can be used to help explain the development of this ceramic industry and where it is found. A secondary focus of this study is to classify and describe pottery which has, up to this point, only been labelled as 'plains-like' in the literature.
2.0 Considerations for Ceramic Analysis

2.1 Introduction: The Type-Variety System

The type-variety system of classifying ceramics will be utilized in this research. It has been postulated that through the use of this system the "establishment of ceramic complexes and ceramic sequences is made possible, and the chronological development of pottery in time and space can be brought to light" (Sabloff and Smith 1969:279). This form of classification allows for intersite comparison, an important aim of this research, which is attempting to order ceramics in a regional perspective.

Within a typological grouping of artifacts, there is a core of shared or co-occurring attributes or attribute-states which relate primarily to form and decoration. However, not every artifact will share the exact same attributes. There will be several varieties based on the combination of these attributes or attribute states, though some may co-occur with greater frequency than others. This is akin to Clarke's (1968:668) definition of a polythetic set where

An aggregate of entities or systems are said to be polythetic if each individual possesses a large but unspecified number of the attributes of the
aggregate, if each attribute is possessed by large numbers of these individuals, and no single attribute is both sufficient and necessary to the aggregate membership.

Types are rarely fully polythetic, however. In most cases there are attributes or attribute states which are shared throughout the type. A definition more applicable to types, then, would be "an homogenous population of artifacts which share a consistently recurrent range of attribute states within a given polythetic set" (Clarke 1968:198).

Those attributes within the polythetic set which are shared by all members of the grouping can be viewed as core traits, providing the foundation for a basic form. The presence of other attributes or attribute-states on these artifacts, above and beyond the core traits, allow for the formulation of type-varieties. Clarke (1968:198) states that a type-variety, or subtype, is an "homogenous sub-population of artifacts which share a given subset within an artifact-type's polythetic set of attributes. A sub-population with a high level of affinity...uniting the individuals within the whole".

2.2 Terminology

2.2.1 Attributes

An attribute is the minimal characteristic used to classify an artifact or series of artifacts into types. The number of attributes which can be recognized from a
pottery vessel, or any artifact for that matter, is infinite (Rice 1987:276). But what attributes are the most important in elucidating past cultural dynamics? In order to understand which attributes are most important to study, the development of a research question must come first. Then, the attributes most applicable to answering the question will become more obvious (Rice 1987:283; Trigger 1990:203). Through the delineation of applicable attributes, it is hoped that the archaeologist can make a contribution to the understanding of past peoples, their behaviours, and their social structures. In many cases, attributes are the physical representation of techniques. Attributes reveal their relevance by appearing repeatedly in their artifact classes; their repeated appearance aids in the reconstruction of past traditions and hopefully can shed light on people's behaviour and what influences their choices (Rye 1988:4).

Classification based on a suite of attributes allows one to bring order to information. It provides a means by which to define a range of variability within the data. It allows a researcher to define types, or clusters of attributes which occur together repeatedly. And, it might provide an opportunity to find significance within the classes which could not be seen if attributes were not isolated, defined, and analysed for co-occurrences (Sharer and Ashmore 1993:288-289). It also makes possible the development of typologies which involve moving the

Attributes used to classify artifacts, and pottery in particular herein, fall into three main divisions:

i) style attributes: these are the most obvious descriptive characteristics of an artifact, and usually relate to the color, decoration, and texture of the artifact.

ii) form attributes: these relate to the three dimensional shape of the artifact, the shape of the whole and its parts. These attributes can actually be measured.

iii) technology attributes: these relate to what the object is made out of, and the way it was made (Sharer and Ashmore 1993: 293-294).

Attributes in each of these divisions can occur in states. For instance, the style attribute of colour has states such as red, blue, and black. The wedge-shaped lip is an example of a form attribute-state. That is, the specific value or nature of an attribute is called an attribute state.

Following Sabloff and Smith's (1969) example, decorative and formal attributes will be of primary importance in classifying ceramic vessels in this research. The attribute recognition system utilized will be the attribute-state system, where an attribute exists in several states. The focus of this research is to compare and contrast the occurrence and changes in decoration and vessel shape, and the co-occurrence of particular
decoration with particular vessel shapes as an indicator of social systems and marriage patterns.

2.2.2 Types

In using typologies in the study of prehistory, fundamental assumptions concerning ceramics, such as their change in popularity through time and the possible exchange of ideas concerning types through trade or the merging of peoples, must be accepted by the researcher (Hedden 1992:37-38). In analysing and choosing variables and setting up classifications, the researcher is always presented with the task of determining which attributes and attribute states can most adequately explain or describe certain behaviours. At what point does variability in the data prescribe differentiation and division? Will the choices made by the researcher fit with the vision of the original artisan?

It has been argued that any artifact class formed by the association of two or more attributes can be representative of patterned behaviour (Hill and Evans 1972:233). Whether this recognition of patterned behaviour corresponds to 'emically' held notions concerning the object in question is another matter which may or may not ever be reconciled. Regardless, one still has to outline at what point classes of data are divided or lumped in order to pursue an interpretation of past behaviours. As Rice (1987:284) points out,
...selection has to be made, and it is that choice that governs the nature of the resultant classes. Furthermore, because the types formed are an artifact of the attribute selection process, it is pointless to argue whether a single classification is the best or only for a particular data set. Attributes are selected either because they pertain to a particular problem or based on some consensus concerning their role within a given classificatory scheme (e.g., the type-variety system).

As already proposed, the selection of attributes to formulate types within this project relates to decoration, form, and the presence of particular kinds of decoration on particular zones of vessels. Ideally, the types set up through correlating these attributes will suggest relationships which go beyond the simple description and classification of the pottery. Optimistically, they will provide meaningful insight into social behaviours and the society within which the artisans operated. We must always realize that people made the artifact. While objects can provide information of themselves, they are always representative of behaviour expressed by past and present peoples.

Types represent groups of artifacts tied together by a high level of correspondence between sets of attributes though they may vary amongst themselves within a polythetic pattern (Clarke 1968:191). Personal whim, spatial factors, material restrictions and outside influences introduce variability into patterns which often negate the possibility that the pattern will be monothetic (i.e. the
artifacts in the pattern all subscribe to the same selected varieties of attributes in all instances). The artifacts in the pattern may share attributes with other types which might suggest technological or cultural relationships, though obviously not to the same extent.

Sabloff and Smith have composed a definition for types as they relate to ceramics, in which a type is

an aggregate of visually distinct ceramic attributes already objectified within one or (generally) several varieties which, when taken as a whole, are indicative of a particular class of pottery produced during a specific time interval within a specific region (1969:278).

This definition contains several requirements. First, it requires that several attributes must be taken together to form a type. Second, the attributes usually exist in several varieties which allow for differentiation and correlation. Third, the clusters of attributes reflect behaviour which was enacted within a particular time frame in a particular area. That is, a type is tied into patterned behaviour which undergoes variation, for whatever reason, within a prescribed time and place.

The type-variety form of analysis is based on the definition of attributes and the determination of the way sets of attributes combine to form a hierarchy of typological units (ware-type-variety). Stylistic, formal, and technological attributes are used to help define types (Sharer and Ashmore 1993:361). The formulation of types is an inductive process as
the definition results from assembling the [real] group of artifacts that is thought to belong together... (and) the inductive definition of a type changes as soon as any newly discovered artifacts are included in it (van der Leeuw 1991:22).

The hierarchical classification of ceramics, from varieties to types to wares, may reflect the ancient potter's social system. Varieties within types may reflect the work of individual potters or small groups of related potters within a larger social group. The type, then, may reflect the work and preferences of the larger social group. The ware, which exists as long as or longer than any of its constituent types, provides a broad view of the patterns related to the ceramic technology maintained by the pottery producing population through space and time.

Lehmer's (1954:40) and Sabloff and Smith's (1969:278) definition of ceramic types both relate to observable and distinct variations in decorative treatment and form which are diagnostic of pottery produced in specific time intervals within particular regions. The use or formulation of types within the Selkirk composite, which is the most relevant example here, is based on the recognition of visually distinct decorative and formal attributes which are indicative of particular regions and times. For instance, in order to fit into a type a pot, or several pots, might have to exhibit punctates on the rim. Through the presence of additional decoration on the lip the pot(s)
might constitute an identifiable type-variety in comparison to the rest of the pots of that type.

While there is considerable division over the utility of types and what they mean as an archaeological construct, their use herein will follow the previous research conducted in central and western Canada. As Hedden (1992:39) has advocated, "[t]he use of named types...maintains consistency with previous analysis". The type-variety method is effective in promoting consistent classification and description of pottery, which encourages comparable type descriptions among assemblages, facilitating recognition of space and time relationships in prehistory (Sharer and Ashmore 1993:362). This, of course, suggests a predominantly culture-historical outlook.

The employment of new types, according to Butler and Hoffman (1992:6), requires that descriptions and definitions should be mutually exclusive, with the use of a geographic name followed by a descriptive term. A descriptive term might encompass a coloration scheme, a surface treatment, or a decorative motif. The types identified and described herein followed this scheme.

The typological categorizations developed in this thesis were not based on statistical tests. This is primarily because of small sample size. Less than 65 vessels were examined, representing two different wares. As a result, the types were identified inductively and following means commonly used in identifying types in
central Canada. Once the sample was divided into wares, it was further broken down by vessel morphology and decoration. If vessels matched types already established in other studies, they would be identified as such. Previously unidentified or undescribed types were categorized based on the covariation of decoration attributes and vessel zone attribute states.

2.2.3 Wares

A classificatory unit subsuming the type is the ware. Lehmer (1954:41) defines a ware as a cluster or grouping of types which share a majority of basic features including vessel form, surface finish, and the substance of the pottery itself (i.e. paste qualities). Variation in vessel form has not always been used for ware association; rather, its application is often utilized in type description. Sabloff and Smith (1969:278) argue that ceramic vessels are associated with a ware through similarities in paste composition and surface finish alone. These criteria will be adhered herein. The ware has a time duration equal to, or usually greater than that of its types and varieties. Each type exhibits all of the representative features of the ware.
2.3 Decorative and Morphological Attributes

2.3.1 Stylistic Attributes

Stylistic attributes, those characteristics which in this case relate to decoration, are non-functional in that they do not enhance the utility of the vessel nor do they exhibit any wear beyond that related to the manufacture of the attribute, though they might be functional in a communicative or signaling sense (Close 1987:7; Sackett 1977:373, 1986:268-270; Rice 1987:144; Weissner 1983:257; Wobst 1977:318, 321). In central Canada these attributes are the result of techniques which displace clay. They are the result of patterned behaviour which might reflect the acceptable stylistic expressions of the group in which they are made, though it is certainly possible that they reflect behaviour with anticipated results, such as signaling ethnic ties or various social positions.

The ceramic decorations, and techniques of applying them, deemed important for this study are described below (Figure 2.1).

- Punctate: an impression deeper than it is wide.
- Boss: a raised node of clay produced by a punctate which might be the desired decoration itself.
- Cord-wrapped tool (CWT) impression: a decoration made by impressing a tool wound with a twisted cord into the clay.
Figure 2.1 Decorative Elements
Typical zones found on pots include lip, rim, neck, shoulder, and body, with subzones expanded on these terms.

'Vessel form' is generally a term applied to the overall shape of the pot in long section. Three forms from central Canada are usually recognized - conical, sub-conical, and globular. Conical vessels are coconut or cone shaped, with no distinguishable neck or shoulder; they have a recognizable lip, and a convex or globular body of varying curvature leading to a rounded, pointed, or flattened base. Sub-conical vessels have "obvious but not pronounced shoulders, a slightly constricted neck, and a slightly [conical] base" (Anfinson 1979:224). A globular pot has a rounded body, pronounced shoulders, a constricted neck, and an orifice opening smaller in diameter than the maximum width of the vessel (Anfinson 1979:221).

2.3.2.1 Lip

This zone is comprised of the surface of the rim or upper neck, an inner corner, and an outer corner. This section rings the orifice of the vessel, with the inner and outer corners being formed by the junction of the inner and outer surfaces of the pot with the lip surface (Figure 2.2).

The shape of the lip (i.e. the lip attribute state) can vary dramatically between vessels, particularly between those associated with different pottery making groups. They may also vary on the same vessel, primarily on those
- Incising: the drawing of a pointed or sharp edged tool through the clay, leaving a deep and thin mark.
- Sharp-edged tool (SET) impression: the direct impression of the thin edge of a tool into the paste.
- Smooth-tool impression: the mark left by the impression of a rounded, undecorated tool.
- Twisted-Cord Impression: the mark left by the impression of a single, twisted cord.
- Pinching: finger pinching involves squeezing clay between the fingertips to raise a mound. Fingernail pinching gouges the clay to form semi-lunar impressions on either side of, and somewhat underneath, the mound.

Each of the above have a range of states or variation, to be discussed in context.

(taken from Malainey 1991; Rice 1987; Syms et al. 1986).

2.3.2 Form Attributes: Vessel Zones

Form attributes relate to the morphology of the vessel. These attributes can be defined by particular zones of the vessel, even when small portions of the vessel are present. The different zones of the vessel, when placed together, form the profile of the vessel. Any sherd of sufficient size can be described as belonging to a particular profile zone by its morphological attributes.
Figure 2.2 Lip Shapes

Exterior to Left
with irregular craftsmanship. Cross sections of lip profiles recognized in Saskatchewan include:

- square: sharp/obvious corners and a flat surface.
- rounded: a symmetrically convex surface.
- subrounded: a flat surface with round corners.
- tapered: a gradually thinning, rounded or pointed lip.
- bevelled: one lip corner is higher than the other.
- expanding: both or either of the corners bulge outwards.
- flanged: one of the corners protrudes prominently outwards.
- wedge-shaped: asymmetric lip in which the exterior portion of the wall just below the lip has been thickened producing an inflection, with the lip surface angled in towards the orifice.
- pulled-over: the clay of the upper neck or rim has been folded over to form the lip surface, resulting in an expansion on the exterior. This is then smoothed for coherence to the exterior surface. This pulling action is apparent in the profile of the sherd. This is somewhat similar to the braced morphology of Plains Village tradition ceramics.

2.3.2.2 Rim

The rim is that section of the profile marked by a change in inflection from the neck constriction upward (Ahler and Swenson 1985:5-8). As Sheppard (1954:226) notes, no matter how abrupt or smooth the curvature in the vessel profile, the precise point of inflection can be defined by noting where a line tangent to the vessel wall reverses its direction of rotation when moved upward or downward along the wall. It follows then, by way of example, that what has traditionally been called an excursive rim is not a rim at all, but an extension of the curvature forming the neck constriction. Restated, this simply means that if there is no inflection marking a change in the curvature between concavity to convexity, the rim is merely an extension of the neck and should be recognized as part of the neck (Figure 2.3).

The only rims (i.e. rim attribute states), then, which can be recognized for the purposes of this study are S-shaped rims and angled rims. An angled rim exhibits an angular inflection above the neck and below the lip leading, usually, into an insloping straight or slightly convex rim. An S-shaped rim exhibits a rounded inflection, with an insloping rounded or convex rim (Figure 2.3).

2.3.2.3 Neck

The neck is the constricted portion of the vessel (Figure 2.3). The neck extends from above the shoulder to
Figure 2.3 Vessel zones and profiles

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the lip or the next change in inflection on the profile, and as such is a measurable zone. The neck is, in the majority of cases, the point of maximum constriction on the vessel (Ahler and Swenson 1985:5-8, 15; Anfinson 1979:222).

2.3.2.4 Shoulder

The shoulder exists as a convex curvature below the neck and the state of the shoulder can range from being markedly angular to rounded (Figure 2.3). The shoulder is the point of maximum diameter on the vessel and is a measurable inflection (Anfinson 1979:223; Malainey 1991:43). The shoulder curvature continues on to form the body, as often times there is not a change in inflection from the base to the shoulder apex.

2.3.2.5 Base

The base is that portion of the pot where the body walls meet, the floor of the vessel which supports it when laid at rest. It is generally thick in relation to the rest of the body. The three most common basal forms are the rounded base, the pointed base, and the flat base (Syms et al. 1986:2; Anfinson 1979:219).

- Rounded: a rounded base maintains a curvature, though it may be somewhat flattened if placed base-down while drying.
-Pointed: a cone-shaped base is added to the bottom of the pot, usually at the end of the manufacturing sequence.
-Flat: a flat base is marked by an inflection, possibly thickened, between the vessel wall and the base.

2.3.2.6 Vessel Surfaces

The nature of the interior and exterior surfaces of a pottery vessel can provide clues as to its affiliation and to the mode of production. Each pottery making tradition involved the production of a distinctive or recognizable surface treatment, from smooth to elaborate. Examples in Saskatchewan include:

-Simple-stamped: a series of shallow grooves and low ridges produced by a paddle with parallel lines cut into it.
-Check-stamped: a series of waffle-shaped impressions, produced by a paddle with perpendicular lines cut into it.
-Textile-impressed: a closely spaced, uniform, dimpled impression resulting from the application of a tightly intertwined textile. Theoretically, it would
be possible to trace the individual cords around the pot.

- **Vertical textile-impressed**: a vertically-aligned impression of elongate or parallel intertwined cords.
- **Plain**: a lack of impressions resulting from paddling the pot with a smooth paddle or a lack of impression
- **Wiped or Smoothed**: series of striations resulting from wiping the surface with a cloth.
- **Brushed**: numerous, and often deep, striations resulting from drawing a brush of some sort across the vessel.
- **Burnished**: a degree of gloss resulting from polishing or rubbing the clay when leather dry with a smooth object.


### 2.4 Ceramic Descriptions

Vessels were identified and differentiated primarily on the basis of lip and rim profiles and decorative treatments. Reconstruction was attempted in all cases where there was more than one sherd belonging to the same vessel. Sherds were assigned to the same vessel if they exhibited the same decorative combinations, and the same lip and/or rim profiles.

The vessels were described primarily from a neck-up perspective as the pots were largely incomplete. Each
vessel was described noting profile, decorative treatment, measurements of vessel zones and decorative elements, surface treatments, and paste and temper qualities. When applicable, an estimation of the inner lip diameter of the vessels was calculated to suggest a range of vessel sizes for the recognizable types.
3.0 The Selkirk Composite with Special Reference to Saskatchewan: Previous Research

3.1 General Overview

This chapter will be devoted to reviewing the literature pertaining primarily to the ceramic industries of the known Saskatchewan Selkirk complexes, with mention of the associated aceramic industries. The Selkirk composite, dating ca. A.D. 1300-1700, is a geographically extensive archaeological construct consisting of several regional complexes and is identified primarily on the basis of Selkirk ware. This composite has a fairly uniform bone and lithic industry. A composite has been defined by Syms (1977:70-71) as a grouping of related complexes, where a composite is the total expression of a number of assemblages left by the same group over a sufficiently narrow time period that the cultural expressions undergo only minor changes" and "share a set of traits, both technological and stylistic, that may be conceived as being sufficiently different that microevolutionary changes have taken place.

Therefore, though the Selkirk composite is an identifiable unit as a whole, "[s]ufficient variation is present in the ceramic styles...to prompt the recognition of regional complexes" (Meyer and Russell 1987:4). These
regional complexes "share the same ceramic types although each usually has its distinctive types" and "[t]he shared types usually occur in differing frequencies from one complex to the next" (Meyer 1984:45). Each regional complex expresses variations on a common technology made by, presumably, related peoples. The complexes identified to date are the Clearwater Lake, Grass River, Kame Hills, Pehonan, and Kisis (Meyer and Russell 1987:5-19). Due to a lack of investigation it is not possible to define the distribution of the Grass River complex with any certainty. The Winnipeg River complex of southeastern and adjacent northwestern Ontario, originally described as part of the Selkirk composite, has recently been reclassified as part of the Rainy River composite (Lenius and Olinyk 1990:100).

### 3.1.1 Ceramics

The ceramic industry which is diagnostic of the Selkirk composite, and thus an intrinsic part of each is Selkirk complex, is based on one ware, Selkirk. This large taxonomic grouping is based on a set of universal features which can be found on nearly all vessels recovered from Selkirk components. Vessels are typically globular in morphology, with a characteristic smoothed exterior textile impression. Paste is often laminated with a tendency to exfoliate, and is tempered with coarse, crushed grit made up primarily of quartz and feldspar (Hanna 1983:31; Hlady 1970:111-112, 1971:7-8; Meyer 1981:24-26). A single row of
punctates encircling the neck or rim and lip decoration are commonly found on these vessels.

The vessels' bodies appear to have been fashioned by joining flattened pancakes of clay which were smoothed together to secure the joints (Hlady 1970, 1971). Paddling further consolidated the paste as suggested by shallow anvil depressions on the interior of the pots. The body would be wrapped in a textile bag and placed in a mold to dry. The textile bag would prevent the clay from sticking to the mold (Hanna 1983:31-32; Learn 1986:59, 62-63). The mold, possibly a hole in the ground, a basket or the base of a broken pot, provided stability while the shoulder to lip region was added on (Hanna 1983:31-34; Learn 1986:60-63). Impressions on the vessel exteriors which maintain a uniform weave pattern over the surface support the idea that a textile bag was used as a parting agent (Hanna 1983:32-33; Saylor 1978:51-52).

3.1.2 Non-Ceramic Industry

While there are several distinctive ceramic styles making up the pottery technology of the Selkirk composite, the complexes share a similar non-ceramic industry. The diversity of both lithic and faunal artifacts in Selkirk components represents a manifold adaptation to the extensive boreal forest resource base.
3.1.2.1 Lithic Industry

The lithic tool industry is typified by an exploitation of local materials. The inhabitants of the boreal forest live either on the Precambrian Shield or on a landscape made up of shield materials. Thus, the available lithic materials are primarily igneous in origin, and are not easily workable (Hlady 1971:25; Meyer 1978b:36). Selkirk peoples crafted small triangular points and (often amorphous) side-notched points (Forsman 1976:239; Hlady 1971:22-23; Meyer 1978b:35; Millar 1983:113, 137), which MacNeish (1958:69) introduced as Selkirk side-notched. More southerly expressions of the Selkirk composite, such as the Pehonan complex, exhibit some carefully fashioned points closer to the Plains side-notched style. These are made from finer-grained materials, evidently due to contact with and influence by plains groups (Meyer 1981:26-27).

Other bifacial tools, as well as unifacial tools, are commonly found in Selkirk occupations across northern Manitoba and Saskatchewan. These tiny to quite large items are commonly made of vein quartz and quartzites, while the more precisely crafted implements are fashioned from split pebble cherts or silicified sediment. Endscrapers and sidescrapers dominate the unifacial tool assemblages described in northwestern Manitoba (Hlady 1971:24). Bifaces occur primarily in ovoid form (Hlady 1971:24; Meyer 1978b:39). Hammerstones and large chopper-style tools are
present, made from resilient igneous and metamorphic materials (Hlady 1971; Meyer 1978; Millar 1983).

Ground stone tools, such as adzes and celts were fashioned from materials such as schist, slate, and shale (Hlady 1970:114, 1971:24; Meyer 1978b:35, 39; Meyer 1981:26; Meyer and Russell, 1987:17). They were fashioned first through chipping, then were ground. Several such items have been found in a chipped preform stage, presumably deposited prior to being ground.

3.1.2.2 Bone Tools

Bone tools are common recoveries from Selkirk composite sites and include antler harpoons (both bilaterally and unilaterally barbed), antler flaking tools, bone tubes, beads, pendants, long bone fleshers, polished bone awls, shaft straighteners, bone flake smoothing tools, and snowshoe needles (Hlady 1971:24; Meyer 1978b:39, 1981:26; Millar 1983:197-200). The fact that boreal forest soils are highly acidic (due to pine and spruce litter) and organic materials tend to decompose rather rapidly suggests that these peoples made and used a large number of bone tools.

3.2 Regional Complexes

A discourse on all five recognized Selkirk complexes would be unnecessary for the purposes of this research. A comprehensive account of the composite has been produced by Meyer and Russell (1987), Hlady (1970, 1971) defined the
Clearwater Lake complex and proposed the Grass River complex, Meyer has written on the Clearwater Lake complex (1978b) and the Pehonan complex (1981, 1984), and Dickson (1980) researched the Kame Hills complex. The reader is directed to these works for more comprehensive analyses.

In order to draw comparisons and contrasts with the ceramics examined in this research, a review of the literature concerned with Selkirk ceramics from northern Saskatchewan has been conducted. The three named complexes from Saskatchewan, the Clearwater Lake, Pehonan, and Kisis complexes, will be described herein with their major diagnostic features highlighted.

3.2.1 The Clearwater Lake Complex

The Clearwater Lake complex was first described and classified by Walter Hlady (1970, 1971) based on ceramic recoveries from west-central Manitoba, but extends well into northern Saskatchewan. The materials Hlady examined were primarily from the Clearwater Lake site (located on the southwestern corner of Clearwater Lake, Manitoba), augmented with specimens from avocational collections and pottery recovered from the Grand Rapids Reservoir Survey (Hlady 1971:1, 6). From his analysis, a definition of the Clearwater Lake [sic] Phase was formulated. These vessels were felt to be representative of Winnipeg Fabric-Impressed ware (MacNeish 1958) based on surface treatment and paste quality. Hlady also recognized a distinctive type, the
Clearwater Lake Punctate type. This type's diagnostic feature was the consistent presence of a single row of punctates on the rim (Hlady 1971:17). The surface texturing consists of a variably smoothed woven, interlinked, or twined textile impression (Saylor 1978:52, 55-56).

The ceramic assemblages Hlady described, and in particular the Clearwater Lake Punctate type of vessel, were characterized by pottery which had a globular body with a rounded base, prominent to slightly rounded shoulders, sharply to gently curving necks, and a rim orientation ranging from near vertical to out-flaring, topped with an often flattened and smoothed lip (Hlady 1970:112; 1971:7-8). Within the Clearwater Lake Punctate type Hlady described a 'basic' mode and 21 other modes. These were differentiated and described based on decoration found on the lip and the neck. Neck or rim decoration always consisted of a single row of punctates. A second vessel type was totally lacking in decoration; Hlady (1971:13) stated that there was most likely a strong connection between this form and the Alexander Fabric Impressed type described by MacNeish (1958:165-167), a connection since established in the literature.

The shape of the punctates was one criteria used in dividing the samples examined into different modes. Round, oval, semi-lunar, triangular, and rectangular punctates were recognized. In addition to punctate shape and their
placement (they could also be found on the lip surface), impressions of varying morphology, placement, and orientation were another criteria for splitting the assemblages into modes. Smooth-tool impressions, CWT impressions, fabric impressions on the lip surface, incisions, and square-edged tool impressions were among those recognized (Hlady 1971:8-14).

Hlady (1971:17) noted that, unlike MacNeish's sample from southeastern Manitoba, there was not one rim sherd which exhibited more than one row of punctates. While the northern ceramics did, in essence, resemble those of MacNeish's Selkirk focus, they could stand on their own as an archaeological unit (Hlady 1971:17-18). Hlady suggested that his Clearwater Lake "phase" could be differentiated from MacNeish's Selkirk Focus based on "differences in pottery decoration, although body surfacing and vessel forms are very similar;...[there is] a wider variety of stone scrapers for the Clearwater Lake Phase,...and a wider range of bone tools in the Clearwater Lake Phase" (Hlady 1970:114).

In 1973 and 1974 the Churchill River Archaeology Study was conducted in northern Saskatchewan under the direction of, first, Henry Epp and, then, David Meyer. This program of reconnaissance and test excavation led to the recovery of a significant amount of pottery similar to that which Hlady had reported from Manitoba. Meyer and Smailes (1975:45) identified 54 sites containing Clearwater Lake
Punctate type vessels, based on Winnipeg Fabric-Impressed sherds, though only 16 vessels could be confidently assigned through diagnostic rimsherds (Meyer 1978b:30). Sites had also been identified further to the north and west which exhibited this type of pottery, suggesting a territory covering a good portion of northern Saskatchewan (Meyer 1978b:31). The locus of this territory was suggested to be the Sturgeon-weir River, the Churchill River, and Reindeer River systems, though the pottery found within the territory was considered to be relatively homogeneous at the time (Meyer 1978b:32).

The sample recovered displayed vessel walls ranging from 5-10 mm thick, with lamination and exfoliation common, and paste colour ranging from dark brown to grey, suggestive of firing in a reducing atmosphere (Meyer 1978b:32). The surface treatment consisted of textile impressions smoothed to varying degrees. Meyer did note some differences in the pottery he analyzed compared with that described by Hlady. Very little sand temper could be found in sherds from the Saskatchewan ceramics, the sample consisting of almost 100% grit tempered sherds (Meyer 1978a:7). In addition there was little variety demonstrated in the morphology of punctates in Saskatchewan, being primarily round or oval. Meyer (1978a:8) noted that in the sample examined by Hlady, crescentric or rectangular punctates occurred in a low frequency and were probably idiosyncratic works. In short, they probably did not
represent a common variety found within the Clearwater Lake Punctate type.

In fact, some of Hlady's comments regarding punctate shape and their importance in assigning modes provoked Meyer to suggest that "in any case...[the analysis] casts considerable doubt on the importance of punctate shape in determining mode definitions" (1978a:8). In addition, the definition of modes based on round versus oval punctates is not valid because many vessels contain punctates varying from round to oval, probably resulting from variations in motor habits.

Meyer suggested that the significant amounts of Selkirk ware pottery found during the Churchill River Study represented "a marked population increase as compared with the Laurel and Blackduck periods" (Meyer 1978a:29) in the project region.

3.2.2 The Pehonan Complex

The Pehonan complex, centred along the upper Saskatchewan River valley of east-central Saskatchewan, including the Nipawin area in particular (Meyer 1981:35), is a second complex of the Selkirk composite. The identification of the Pehonan complex arose out of survey and excavation in response to the damming of the Saskatchewan River which would create a reservoir 65 km long and approximately 3,000 hectares in extent (Meyer 1982:2). The Selkirk ware recovered from several sites
identified during this multi-year project resulted in the recognition and definition of the Pehonan complex. Of all the complexes defined to date for the Selkirk composite, the Pehonan complex occurs the farthest south, oftentimes bordering on the northern fringes of the plains.

Ceramics from the Saskatchewan River valley have been known for a considerable period of time, but had originally been described as belonging to the Clearwater Lake complex. Eventually it was recognized that variability within these assemblages did not fit with what Hlady had originally identified for the Clearwater Lake complex (Meyer 1978b:31, 34). The fact that no sites were ever excavated producing a 'pure' Clearwater Lake assemblage was indicative of this divergence. Re-assessment of the ceramics led researchers to realize that these new traits were characteristic of plains complexes from a similar time period (Burley et al. 1982:83). As Meyer (1981:29) noted "...it is apparent that some features of Pehonan complex pottery, such as decorated shoulders, are a result of influence from these [Saskatchewan Basin Ware Late Variant] prairie ceramics".

Whereas Hlady described pottery which generally had rounded, and sometimes prominent shoulders, vertical to out-flaring rims, and decoration consisting of CWT impressions, punctates, and smooth tool impressions, these more southwestern vessels were noticeably different. They exhibited attributes such as angular and decorated shoulders, S-shaped rims and occasional angled rims,
markedly constricted necks, and decorative elements such as pinching, interior punctates, and (rare) multiple rows of CWT impressions applied between the lip and the shoulder. It became apparent that, while the pottery had an underlying similarity to the materials further to the north and east, these assemblages represented a pottery making tradition that had developed more regionally diagnostic traits (Meyer 1981:30; Quigg 1983:147-169).

While exhibiting decorative and morphological variations, the Pehonan pottery subscribes to the basic traits all Selkirk ware exhibits (Meyer 1981:30, 31) and the fabric of the clay of Pehonan vessels is still similar to that of the Clearwater Lake pots. The pottery is quite thin-walled, but with a tendency to lamination and exfoliation. The coarse-sized temper is consistently derived from crushed granite. The vessel interiors are wiped or smoothed, producing striae oriented horizontal to the lip from the shoulder up. Frequently, carbon residue encrustations are found on the interior of these pots. The exterior surface treatment is typically a smoothed textile impression, though the variation in the weave of the textile may be considerable, ranging from vertically oriented loosely twined textiles to tightly woven fabrics (Meyer 1978b:34, 1981:24).

At several sites where Pehonan complex pottery was found (e.g. the Lloyd site [FhNa-35], Mollberg site [FhNa-1], Municipal Camp [FhNa-113] sites) indications of
connections to the plains, outside of similarities in ceramic decoration and form, were uncovered (Meyer 1981:29). Ceramics distinctive of plains technology (i.e. check-stamped sherds) were found in the same components along with pieces of Knife River flint and obsidian. This is evidence that the Pehonan complex people were involved in interregional interaction and long range exchange networks (Burley et al. 1982:85; Meyer et al. 1991:72).

The non-ceramic industries also indicated a divergence from more "typical" Selkirk assemblages analyzed from the north and east. For instance, projectile points of the Plains Side-notched type were recovered in high frequencies and made of fine-grained Swan River chert. The presence of grooved and notched mauls might be diagnostic of the Pehonan complex, as none have been identified in Clearwater Lake complex assemblages (Finnigan et al. 1983; Meyer 1981, 1984, 1991; Meyer and Russell 1987; Quigg 1983). Bone and antler tools include unilaterally and bilaterally barbed harpoon heads, (rare) side-notched arrow heads, awls, gorges, bone fleshers, bone ornaments, shell beads, and bird bone flutes. This varied worked bone industry relates to the utilitarian and decorative aspects of life (Meyer and Russell 1987:17; Quigg 1983:169-175).

The inclusion of the Pehonan complex in the Selkirk composite was questioned after its initial identification, with Meyer (1981:31) stating that
it does not appear possible to assign the Pehonan complex to the Selkirk composite. In short, the Pehonan complex must stand alone as a fringe phenomenon, reflecting the intermediate culture of a social group resident in an area transitional between the boreal forest and the prairies.

The differences between it and the other complexes in the Selkirk composite, and its apparent ties to more southern technologies caused a classificatory conundrum.

The Clearwater Lake Punctate type of vessel was found at Pehonan components in the Saskatchewan River valley, but it is the description of two new vessel styles which initially provoked the classification of the ceramic assemblages as distinctive. The two types were the François Punctate type and the Nipawin Horizontal type.

The François Punctate type was based on the Clearwater Lake Punctate type, but influenced by plains pottery styles (Meyer 1981:30, 33-34). Its main distinguishing characteristic was an angular shoulder which was, at times, decorated with smooth or CWT impressions, or sometimes fingernail pinching (Figures 2.1, 2.3). The upper neck, decorated with punctates, was vertical to excurvate in orientation. Lip decoration consisted of CWT or smooth tool impressions on the surface or corners, or with punctates on the lip surface.

The Nipawin Horizontal type, is characterized by pots with multiple horizontal rows of CWT impressions placed between the lip and shoulder. While originally felt to be an important type within Pehonan complex assemblages, it
has now been affiliated with plains-related ceramic traditions (Meyer 1984:44-45). Excavations conducted along the Saskatchewan River subsequent to the initial description of the assemblages containing the Nipawin Horizontal type suggested that its presence was not as widespread or significant as first proposed and was not a result of Selkirk ware technology. This removed the roadblock in linking the remaining ceramics with the Selkirk composite. It was then suggested that the occasional presence of the Nipawin Horizontal type in Pehonan assemblages provided evidence of "trade, southern contacts, or the incorporation of 'foreign' women into Nipawin groups" (Meyer 1984:43).

It appears that the peoples responsible for producing the Pehonan ceramics were well adapted to the regional environment. The remains recovered from several sites suggest relatively large populations subsisting in one area for a considerable period of time on fairly stable, albeit seasonal, resources (Burley et al. 1982:85). The sites from the Nipawin region appear to be open water aggregation locales suggestive of a seasonal occupation of the southern boreal forest in the spring and summer. However, no winter-occupied sites have been identified for these groups in the parklands as suggested by Ray (1974) for historically known groups. It is thought, therefore, that in winter these pottery producing peoples moved deeper into
the forest near large lakes or rivers to subsist on fish and beaver, moose and caribou (Meyer and Epp 1990:335).

The Pehonan complex potters have been proposed as originating from the communities responsible for Clearwater Lake complex ceramics, to the north and east of the Saskatchewan River. Once diverged from the mother population, they came into contact with groups who had ties to the plains and the resources therein. Through interaction, via intermarriage, trade, and site co-habitation, the ceramics which we now classify as belonging to the Pehonan complex were developed (Meyer 1981:34). While still maintaining traits representative of the Selkirk ware, the Pehonan complex ceramics were a manifestation of new ideas regarding variation within the pottery industry.

Archaeological excavations have suggested that the Pehonan complex is centred in the Saskatchewan River valley. However, this might easily be a result of sampling, as the section of the valley impacted by the reservoir has received considerably more scrutiny than surrounding areas. The geographic extent of the complex is thought to encompass the southern fringe of the Saskatchewan forests and the northern edge of the parkland (Meyer 1981:32; Meyer and Epp 1990:335).
3.2.3 The Kisis Complex

The third Selkirk complex identified in Saskatchewan was first described by Millar and Ross in 1982 for the Buffalo Narrows region. In response to development near the village of Buffalo Narrows, three archaeological sites were recognized as significant and were recommended for excavation prior to development. As a result of the survey and excavations at two of these sites, Millar (1983:96, 104) proposed and described the Kisis complex which he felt was a northwesterly manifestation, and subunit, of the Clearwater Lake phase.

In addition to describing and defining the ceramics, he correlated them with lithic and faunal artifacts and features. While no dates were produced for this complex, Millar considered it to date to the very end of the Late Precontact period, perhaps even to the protohistoric. Several components contained precontact artifacts with very early trade goods which possibly reflected trade but no sustained contact, or perhaps indirect trade (Millar and Ross 1982:41; Millar 1983:71).

The Kisis complex is the farthest west manifestation of the Selkirk composite recognized to date. Since the original identification of the ceramics the taxonomic system in which they are classified has been revamped, resulting in the placement of the Kisis complex at the same taxonomic level as the Clearwater Lake complex rather than being a subunit of it. The Kisis complex is not well
known, which is typical of the entire region's archaeological record. To date very few cultural materials have been uncovered and examined, and our knowledge of the groups and their dynamics in the region is minimal.

3.2.3.1 Ceramic Industry

The following is a summary of descriptions of the Kisis complex by Millar and Ross (1982) and Scanlon (n.d-b). The ceramic industry recovered from the survey of the Kisis Channel was described in considerable detail by Millar and Ross (1982), and the Martin Chartier and Bernadette Chartier sites by Millar (1983). The ceramic collections included vessels of the Clearwater Lake Punctate type in addition to pots which were believed to relate to plains pottery making traditions. It was suggested that materials relating to the "Clearwater Lake Phase [sic] indicate an occupation of people from the Middle and Lower Churchill which are included here in the late Prehistoric Kisis complex" (Millar and Ross 1982:51).

While suggesting that the late precontact peoples from the Buffalo Narrows region were related to the groups responsible for producing Clearwater Lake complex pottery, and that much of the pottery was of the Clearwater Lake Punctate type, Millar and Ross (1982:52) stated that "other varieties present could be related to the late prehistoric period on the northern plains". Several pots exhibited
sand temper rather than the typical grit so pervasive in Selkirk pottery from further east.

The definition of the Kisis complex was further expanded in 1982 when excavations were undertaken by Millar (1983) at the Bernadette Chartier and Martin Chartier sites. Components were recognized at both sites which Millar felt equated to what he and Ross had identified as the Kisis complex. The expanded definition of the complex included descriptions not only of pottery, but of lithic tools, features, and bone artifacts (Millar 1983:42-50, 59-71, 96, 104-108). The Selkirk ware pottery exhibited decorative and morphological traits common in Selkirk composite components in northeastern Saskatchewan.

A ceramic-bearing cultural component below the Kisis complex component was also recognized by Millar at the Bernadette Chartier site, which he named the Narrows assemblage (Millar 1983:37). The ceramics from this assemblage appear to relate to the plains-like pottery recovered in the 1981 survey, exhibiting traits such as flattened undecorated lips, punctate decoration, sandy paste with sparse amounts of grit temper, vertically-oriented textile impressions, highly variable wall thickness, and potential conical profiles and profiles with angular shoulders (Millar 1983:188-189, 191-192).

Both archaeological constructs are relatively recent, underlain by a non-ceramic component dated to 1275 +/- 75 years B.P. (Millar 1983:128). Millar (1983:76, 108) makes
the point that, while the pottery from the Narrows assemblage and Kisis complex was different, the lithic industries resemble each other in many respects and "there is a fundamental similarity between the two traditions that implies some degree of cultural relationship".

Similar ceramic recoveries were made by Scanlon during excavations in 1983. Clearwater Lake Punctate type vessels were similar to those found elsewhere in the province, but with a minimum of decoration beyond the single row of punctates. Most noteworthy among the Selkirk ware ceramics were traits previously unrecognized in the region. These included an S-shaped rim morphology, a line of fingernail pinches on the rim apex above a line of punctates, and an ochre-washed interior. Scanlon (n.d-b) recognized these traits as similar to those identified from the Nipawin region. Plains-like pottery was also recognized which displayed punctates, sand-tempered paste, constricted necks and upright or slightly outflaring upper necks, and cord roughened or vertically-aligned textile impressions.

3.2.3.2 Features and Non-Ceramic Industry

Little is known, conclusively, about the non-ceramic industries associated with the recovered pot sherds. To date, the only artifacts and features associated with ceramics have been those from the two Chartier sites. The work at the Ice House site produced similar artifacts and
features, but the lack of records prohibits any clear association with any ceramics.

Features included hearths and ash lenses with associated cobble stones on flat ground with tight lithic, bone, and ceramic distributions around them, functioning as food preparation and cooking areas (Millar 1983:66-67, 69, 214). An pre-modern excavated trench 4m x 1m long x .4m deep from G10c-20 was identified containing artifacts representative of the Kisis complex (Component II). An explanation for the trench could not be suggested (Millar 1983:210-121). Small pits were also uncovered containing fine charcoal pieces and quartzite shatter and flakes, though no function was ascribed to them (Millar 1983:214). Three sets of stone-slab mosaics were discovered and several classes of artifacts were associated with them. Their presence near a hearth suggests they could be work areas analogous to kitchen counters (Millar 1983:50). Scanlon (n.d-e) noted similar features, but a lack of documentation has prohibited an association with any diagnostic pottery.

The lithic fine tool technology associated with the Kisis complex components included a small side-notched projectile point from the joined component, component II/III, at the Bernadette Chartier site which may or may not be from the Kisis complex (Millar 1983:72). Also present were bifaces (small discoidal, D shaped, and large) in low frequencies. Endscrapers were present in a variety
of forms, such as small and snub-nosed, medium-sized flat and rectangular, and flat and contracting. Concave, serrated unilateral, triangular bilateral, straight and convex lateral unifaces were identified as were retouched and use-modified flakes.

The coarse tool technology Millar identified included choppers, scraping and smoothing tools of various sizes and shapes, and net sinkers. One elongated coarse stone tool was identified as an adze. The bipolar technology included pebble cores and spalls and flake cores and spalls. The coarse stone tools were made from igneous materials, quartzites, and silicified sandstones while the smaller and more finely crafted tools were made of vein quartz, Beaver River quartzite and fused sandstone. Exotic materials such as petrified wood and very small amounts of Knife River flint were also used (Millar 1983:48-50, 70-71, 74-75, 105).

Burned, unburned and calcined bone from pike, lake trout, game birds and waterfowl, rabbit, caribou, and moose were common faunal recoveries (Millar 1983:50, 71). Fish were heavily relied on as a food resource by both the Kisis complex and Narrows assemblage peoples (Millar 1983:110). Numerous bone tools were also recovered, including a wedge, side beamer, pointed bone tools, spatulate and smoothing tools made from long bones or rib fragments (Millar 1983:50, 75, 197-200). Interestingly, rabbit incisors were
found which displayed what Millar (1983:71, 104-105, 200) felt was use wear similar to that of beaver incisor gouges.

3.3 Summary

In summary, therefore, the Saskatchewan manifestations of the Selkirk composite can be found, to date, in the Clearwater Lake complex, the Pehonan complex, and most recently, the Kisis complex. Of the three, only the Clearwater Lake and Pehonan complexes have been described in any detail. It is proposed, however, that these complexes are related through the manufacture of a common ware and the recovery of common ceramic types from components made by each of these communities.

The 1981 Kisis Channel survey prompted the recognition of the presence of ceramics representing "two traditions...one relating south to the plains and the other east to the Churchill and further into central Manitoba" (Millar and Ross 1982:126). Those ceramics exhibiting the 'southern' traits originated from an occupation identified as the Narrows assemblage at the Bernadette Chartier site (Millar 1983:101, 113). The adoption of an indigenous, forest-related lithic and bone technology obfuscated the precise relationship of the plains-like ceramics to plains-related groups.

The later ceramic tradition was characterized by "types found associated with Clearwater Lake phase campsites of the Churchill River" (Millar and Ross
1982:122) and labelled as belonging to the Kisis complex. The ceramics, in essence, did not exhibit any marked differences from ceramic assemblages along the Churchill River (Millar 1983:71). Thus, the complex was depicted as a far-western manifestation of the Clearwater Lake phase. It was not until Scanlon's testing and excavations at the Ice House that potentially diagnostic, regional variations were identified.
4.0 Sites and Ceramics

4.1 Introduction

This chapter will deal with an examination of the ceramic materials recovered at five sites in the study area - the Martin and Bernadette Chartier sites, the Ice House site, the McCusker Lake site, and the Sandy Point site. The first three sites are situated on the east side of the Kisis Channel, across from the village of Buffalo Narrows, the fourth approximately 60 km south of the Kisis Channel, and the fifth at Ile à la Crosse (Figure 1.1).

The Chartier sites are located at the south end of the Kisis Channel, just metres away from the shoreline (Figure 1.2). The sites were recognized in an area of dispersed poplar cover, with an understory of willow and blueberry, and a ground cover of moss and Labrador tea (Millar 1983:29). The Ice House site is located across from the village of Buffalo Narrows on the eastern side of the northern entrance to Kisis Channel (Figure 1.2). The site is in a grassy clearing bounded by a low swampy section and a forested section. It has been described as "possibly the most important single site investigated to date in the northern half of Saskatchewan" (Millar and Ross 1982:43). The site extent is roughly 210 m x 80 m. Oral history
"indicates that the clearing has existed throughout collective memory, and that there were at times 20 tents set up on the peninsula" (Rollans 1992:4). At present there are the remains of three ice houses in the grassy meadow, which prompted the naming of the site.

The McCusker Lake site is located on the northern end of McCusker Lake, at the head of the McCusker River. The people who lived along Kisis Channel could have travelled to McCusker River by paddling south to Niska Lake and then along McCusker River. The area falls within the same soil, vegetation, climatic region and life zone as the Kisis Channel, at an elevation of roughly 485 to 516 metres (1 500 to 1 600 feet) above sea level. Like the sites on Kisis Channel, the location of the McCusker Lake site on a river outlet implies its inhabitants had a knowledge of, and were exploiting, seasonally rich fish resources.

The Sandy Point site is located in a garden in the village of Ile à la Crosse, approximately 100 m from shore on the peninsula which juts southeast into Lac Ile à la Crosse. This portion of the peninsula is quite low lying, sandy, with the shoreline region fringed with small bushes, willows, and long grasses.

4.2 The Martin Chartier (Gl0c-20) and Bernadette Chartier (Gl0c-21) Sites
4.2.1 Previous Research

During the 1981 survey the Martin Chartier and Bernadette Chartier sites were identified as significant and were in the path of development and in 1982 a decision was made to excavate the sites in an effort to save the resources (Millar and Ross 1982:3; Millar 1983:4-5). A total of 27m² were excavated at the Bernadette Chartier site and 31m² were excavated at the Martin Chartier site (Millar 1983:38, 59). Two components at the former site and one component at the latter site were ceramic bearing, and thus of relevance to this research. The site areas were not developed, and are still intact.

4.2.2 Martin Chartier Site (Gl0c-20) Ceramics

One vessel is represented in the pottery recoveries from this site but, unfortunately, the sherds could not be located and as such cannot be described here beyond the original work provided by Millar (1983:183-188). This vessel is of the Clearwater Lake Punctate type. Decoration consists of a single row of \( \approx 3/4 \) circle-shaped punctates on the neck (Figure 4.1f). The pot is large, with an inner lip diameter of approximately 21 cm. It has an outflaring upper neck, constricted neck, and slightly expanded lip (Figure 4.2c). The exterior is textile-impressed while the lip does not exhibit any impression, and the interior surface is wiped. The paste is laminated and is moderately tempered with coarse grit.
Figure 4.2  Clearwater Lake Punctate type profiles
4.2.3 Bernadette Chartier Site (Gl0c-21) Ceramics

Four vessels are represented in this assemblage and, as Millar (1983) suggests, might relate to two pottery making traditions as they came from two stratigraphically separated units (though they do merge in one section of the site).

4.2.3.1 Selkirk Ware

Two vessels are of the Clearwater Lake Punctate type. Both are very large, with inner lip diameters of 25.4 cm and 27 cm respectively. The vessel morphology consists of outflaring upper necks, constricted necks, and on one reconstruction, prominent rounded shoulders (Figure 4.2c). The lip corners are decorated with alternating CWT impressions, and the necks display a row of punctates (Figure 4.1a). Heavily smoothed textile impressions are present on both, extending onto the lip of one, and one pot has pronounced interior wiping. The paste is well compacted on one vessel and quite soft and laminated on the other.

4.2.3.2 Non-Selkirk Ware

Two pots identified by Millar (1983) as having ties with plains pottery traditions are included here. One vessel has a slightly expanded or thickened, undecorated lip, and an upright upper neck which is decorated with a row of punctates (Figure 4.3a, 4.4b). This vessel is medium-sized, with an orifice diameter of 14.8 cm. It is
Figure 4.3  Non-Selkirk ware vessel profiles

Figure 4.4  Non-Selkirk ware decoration
difficult to propose a profile because very little of the pot could be reconstructed. However, Millar (1983:103) suggested the vessel was conical or subconical. The surface has been treated with a vertically-oriented textile which has been smoothed to varying degrees but does not extend to the lip surface. The overall workmanship is poor, with marked variations in wall thickness and numerous indentations on both surfaces suggesting handling while still damp. The paste is sandy without noticeable lamination.

A second vessel of questionable affiliation is a miniature (9.6 cm orifice diameter), undecorated pot with a subrounded lip that rolls to the exterior, a slightly outflaring upper neck, gentle neck constriction, and angular shoulder. In profile it somewhat resembles a François Punctate type of vessel. It has a vertically oriented textile impression on the exterior surface which carries onto the lip surface. The paste is compact and moderately tempered with medium to coarse grit.

4.2.4 Summary

Three of the pots from these sites are large Clearwater Lake Punctate type vessels. While varying somewhat in their paste and color characteristics, there is no doubt as to their affiliation, and all three pots came from the same stratigraphic position in both sites.
The two non-Selkirk pots are as much dissimilar to each other as they are to the Clearwater Lake Punctate type vessels. Sherds from both of these vessels were recovered from all three ceramic components at Gl0c-21, a scenario Millar (1983) explained as a result of upward migration.

The components from which these two pots were recovered exhibit a boreal forest-related lithic and bone industry, and small side-notched points were recovered similar to those associated with Selkirk ware in sites further east. The small sample size makes it difficult to confidently assign affiliation for the ceramics, especially in light of the fact that the non-ceramic assemblage relates quite well to a forest-adapted lifestyle.

4.3 The Ice House Site (Gl0c-2)

4.3.1 Previous Research

The majority of the materials analyzed for this research originated from intensive investigations between 1983 and 1985 when Virginia Scanlon, a graduate student of James Millar, began testing and excavating the site for a graduate studies research project. The testing program alone obtained 12,652 artifacts from 134 test units. The materials included copious amount of ceramics which displayed attributes both similar to and distinct from pottery recovered from other Late Precontact sites in the boreal forest of Saskatchewan. Unfortunately, all of the site records save a rough catalogue and a few grant
proposals are missing. Therefore a cultural sequence correlating with a stratigraphic profile could not be constructed.

The 1991 work, conducted by Western Heritage Services Inc. of Saskatoon, did not unearth any remains not already known to this author or reported by Meyer, Millar, and Scanlon. However, it did add a considerable amount of pottery to an already impressive collection. The excavations were located in a recently disturbed area (a result of front-end loader assisted digging activities) and in an adjacent undisturbed area, and consisted of 19m$^2$ of excavation. It is disheartening to note that throughout the site there were piles of discarded artifacts, relating to the undiscriminating eye of pot hunters who were looking for projectile points and other aesthetically pleasing artifacts.

Scanlon (1983:4) mentions that in 1982 roughly 60m$^2$ had been shovelled during pot-hunting activities. These activities were obviously still being carried out in the intervening time as over 500 artifacts were recovered from fresh discard piles in 1991. While the "[a]rtifacts collected from the vandals' caches and backdirt piles are similar to the artifacts collected from site excavations...[t]he only stone tools that were not present in the caches were projectile points, reflecting the high value placed upon these artifacts by collectors" (Rollans 1992:21).
The lack of records relating to the ceramic recoveries from the Ice House site in particular, and from the Kisis Channel survey in general, has made analysis difficult. As a result of this, and due to mixing of components, it is impossible to confidently associate the pottery, the lithics, and the faunal materials from the site.

4.3.2 Ice House Site Ceramics

The sample described herein represents approximately 50 vessels, ranging from single diagnostic rim sherds to larger reconstructions. Within the assemblage, there is a Selkirk-related ceramic industry, along with several vessels which, much like the Component III ceramics from the Bernadette Chartier site, can be described as plains-like. For this section, the vessels representative of these categories will be discussed separately for the purposes of comparison.

4.3.2.1 Selkirk Ware Pottery

4.3.2.1.1 Clearwater Lake Punctate type

This Selkirk vessel type was recovered in the highest frequency (14/26) at the Ice House site. Like those from other sites to the east and south (Hlady 1970, 1971; Meyer 1978a, 1978b, 1981), these fourteen vessels are globular, with rounded to prominent shoulders, constricted necks, vertical to outflaring upper necks, and decoration
consisting of a single row of punctates encircling the neck or upper neck. However, few had lip decoration.

Lip shapes among the Clearwater Lake Punctate type are quite uniform in that the surface was typically fairly flat. Six of the vessels have expanding lips, four vessels have flat lips and distinct corners, two are subrounded, and two pots have very square outlines. One interior and one exterior bevelled lip profiles were present, and one vessel displayed a rounded profile (Figure 2.2). Five of the vessels have smoothed textile impressions on the lip, whereas nine have no such impression present, due to a lack of impression or heavy smoothing. Only one vessel with lip decoration had textile impressions on the lip.

Only five pots have decorated lips (Figure 4.1a, b, c, d). Three of these display CWI impressions which alternate on the corners. One of these three vessels has the impressions oriented in a converging manner (when viewed from the top). In the other two cases the alternating inner and outer impressions give the lip surface a very sinuous appearance. A second form of lip decoration consists of diagonal rough-tool impressions which alternate on the lip corners. These impressions converge when viewed from the top. A third design element is found on one vessel, consisting of a smooth tool, inner lip corner impression which appears to have divided the lip into quarters or eighths.
Very few of these vessels could be reconstructed to any extent, but five pots display an outflaring upper neck and three have vertically-oriented upper necks (Figure 4.2a-d). The vessels had short upper necks (lip corner to the point of maximum constriction), with one upper neck less than 10 mm tall (Figure 4.2d), six between 10 and 30 mm tall, and one between 30 and 40 mm tall (Figure 4.2b).

Round or oval punctates occur on almost 100% of the pots, on the neck or upper neck. The majority of these punctates were deeply impressed, often raising prominent interior bosses. In one instance the punctates were "swirled" after being impressed (Figure 4.1b). It is surmised that a rough tool was first impressed from the lower left then swirled counter-clockwise to form the round punctate.

Punctate diameter was less than 4.0 mm in nine cases, 4.1 to 5.0 mm in three cases and 5.1 to 6.0 mm in two cases. Small punctates were, thus, the favoured size. The punctates tended to be quite closely spaced, with punctates on ten of eleven measurable cases occurring less than 15 mm apart. And, the punctates on ten of the pots were impressed high up on the neck, less than 20 mm below the lip.

The few lip reconstructions present provide a wide range in orifice diameters. Three measurable reconstructions have orifice diameters of 9.4 cm, 13.7 cm, and 19.5 cm.
The surface treatment of the Clearwater Lake Punctate type pots consists of a smoothed fabric or textile impression in one of two forms. One produces uniformly sized depressions (a 'dimple' effect), and the other produces longer, vertically oriented impressions. Nine vessels exhibit the uniform sized impressions whereas four vessels exhibit the more linear, vertically oriented impressions. These impressions all display some degree of smoothing, from light to almost obliterating. The interior surfaces were commonly smoothed or wiped, with horizontal striae present. Carbon encrustations on the interior surface were present which, uncommonly, carried over to the exterior surface.

The paste of the majority of these vessels is tempered with moderate amounts of coarse grit temper which achieves sizes upwards of 6 mm. Some exhibited finer, sometimes sandy, inclusions. The sand might simply have been a natural occurrence, not added intentionally. The paste is generally friable with a high frequency of lamination and exfoliation among the sherds. Surfaces could be oxidized or reduced, and cores were commonly reduced.

4.3.2.1.2 Possible Clearwater Lake Punctate type vessels

Three vessels are present in the assemblage which exhibit many traits normally found in the Clearwater Lake Punctate type repertoire, but the pots have broken in such
a way that no punctates are displayed. Two of the pots have alternating CWT impressions on the lip corners, oriented from lower left to upper right, giving a sinuous appearance when viewed from the top (Figure 4.1a). The third pot is represented by constricted neck and rounded shoulder sherds, characteristic Clearwater Lake Punctate type morphology, but no punctates were present. The exterior surface has been decorated with crushed grit temper (a smoothed textile impression on the exterior indicates no exfoliation had occurred), thus the pot is not of the undecorated Alexander Fabric Impressed type. This technique is identical to that found on François Punctate type pots from McCusker Lake and Anglin Lake.

4.3.2.1.3 Alexander Fabric Impressed type

Undecorated globular pots with rounded shoulders, constricted necks and excurvate or vertically oriented upper necks are called Alexander Fabric Impressed type pots. The Ice House site produced two such pots.

One vessel consists of two small upper neck/lip sherds which are impressed with a vertically oriented, tightly made textile which has been heavily smoothed. There is no curvature to the sherds, possibly reflecting a vertical upper neck, and the lip is quite round. The paste is somewhat sandy, well consolidated, with sparse grit inclusions. The second pot is represented by one upper neck and lip sherd with a flattened and textile-impressed
lip, expanding both to the interior and exterior. The profile is vertical with no hint of exc curvature. The surface impressions are made up of a tightly twined, vertically-oriented textile. The paste is quite well consolidated and temper consists of moderate amounts of coarse, crushed grit.

4.3.2.1.4 François Punctate type

The presence of several angular shoulder sherds from this assemblage suggests the presence of this type but it has not been possible to join them to neck and upper neck or lip sherds to secure this designation. In order to confidently assign a vessel to the François Punctate type it is necessary to join excursive or vertical upper necks, decorated with punctates, to angular shoulders. However, based on paste characteristics and shoulder angularity, these sherds possibly represent two François Punctate vessels.

One vessel exhibits smoothed textile impressions where the individual impressions are quite uniform and heavily smoothed, particularly along the shoulder apex. The sherds are angular, but not markedly so, with an angularity in the range of 131° to 138°. The paste is quite well consolidated with moderate amounts of coarse grit present, and the interior surface is wiped or brushed.

A second vessel has a sharper shoulder, achieving an average shoulder angle of 121°. The shoulder apex is
highly smoothed and undecorated, and the zones above and below the angle display a smoothed, tightly made, textile impression where the individual impressions are vertically oriented. The shoulder is thickened, or at least thicker than the zones above and below it. The paste is compact, somewhat laminated, and is tempered with coarse grit in moderately high amounts, to 4.2 mm in size. The interior surface, though wiped, is rough with small exfoliations.

4.3.2.1.5 Kisis Angled Rim type

A rare occurrence (two specimens) in Nipawin Reservoir Heritage Study sites and not named or described in detail, the Kisis Angled Rim type was recovered quite commonly at the Ice House site. Of 26 Selkirk ware pots from the site, a total of seven such pots was recovered. The origin of this type name follows Butler and Hoffman's (1992) protocol for labelling types where the appellation should include a geographic term followed by a descriptive term. 'Kisis' refers to the specific geographic location from which the type was first recognized (i.e. Kisis Channel) and 'Angled Rim' describes the prominent morphological feature of the vessel type. In addition to displaying a unique profile, these pots have been decorated in a manner not found on other types in the collection.

Three lip shapes are exhibited among the six vessels which have lip surfaces available for scrutiny. Two vessels have square lips, three have lips expanding to the
interior (one of which results from clay being pulled-over to the interior, then smoothed to the wall prior to decoration) with sharp corners or rounded corners, and one pot has an interior bevelled lip with sharp corners (Figure 2.2).

These pots have an insloping rim, and thus, are the only vessel type with a true rim in the assemblage (Figure 4.5). The rim typically lacks any noticeable curvature, though it may be slightly convex or slightly concave. The height of the rim varies from 15 mm to 44 mm between the lip and the inflection point on the exterior of the vessel, though the majority of cases have a rim height over 30 mm.

The inflection point for the rim is angled providing for a rather dramatic, rather than transitional, change in curvature. The neck's concave curvature begins below the inflection point, giving the profile its angled appearance. The neck is constricted, and quite tightly so on six vessels, while one rim angle sherd broke above the neck.

Unfortunately it has not been possible to piece together a full profile for any of these pots, though one lip to shoulder reconstruction has been achieved (Figure 4.5). The neck of this vessel constricts rapidly below the rim angle, leading into a long lower neck of approximately 41 mm before reaching the inflection marking the shoulder curvature, the apex of which is 88 mm from the neck constriction. The shoulder is rounded, but very prominent, and leads into a very thin body (less than 5 mm thick).
Figure 4.5 Kisis Angled Rim type vessel profile reconstruction
A rapid thinning of the neck below the rim angle is common in these vessels. An average thickness ratio, taken on five vessels, for the rim compared to the neck is 1.5:1.0. One vessel, however, exhibits a neck thicker than the rim, though this does not appear to be the norm. The implication of these thickness ratios is that the rim angle and rim region appear to have been added after the lower portions of the pot were constructed.

Decoration on the Kisis Angled Rim type vessels is more diverse than on the Clearwater Lake Punctate type vessels in the same collection, though there are at least twice as many vessels of the latter type. Decoration is restricted to two zones - the lip and the rim angle (Figures 4.6, 4.7). Five, possibly six (the sherd lacks a lip), of the seven pots have lip decoration and one has an undecorated lip. Each of the vessels with lip decoration is unique in terms of its application. Two have CWT impressions (Figure 4.6a, c), one has incised marks (Figure 4.6f), one has sharp-edged tool impressions (Figure 4.6g), and one has smooth tool impressions (Figure 4.6d).

The CWT impressions on the lip of one of the pots are oriented diagonally, from lower left to upper right, on the exterior lip corner and onto the rim. The cords are loosely wrapped around the tool and the impressions are moderately closely spaced (~4 to 8 mm apart). The CWT impressions on the lip of the second pot occur on the inner and outer lip corners, oriented from lower left to upper
Figure 4.6 Lip decoration on Kisis Angled Rim type vessels
Figure 4.7 Rim angle decoration on Kisis Angled Rim type vessels
right. The cords were tightly wrapped around the tool which made the impressions, occurring at intervals similar to those on the previous pot.

One pot has closely spaced (≈1.5 to 4 mm apart) incised marks crossing the entire lip surface. On some portions of the lip the incisions are narrow, whereas in other sections the incisions are broad, possibly made by a square but sharp-edged tool.

One vessel has small, vertical, SET impressions spaced quite closely (i.e. ≈3 to 5 mm apart) on the exterior lip corner. Finally, one pot has closely spaced (≈2.5 mm apart) diagonal smooth tool impressions, oriented lower left to upper right, originating on the outer lip corner and carrying onto the lip surface.

The rim angle is decorated on each vessel, and the common attribute is not the punctate as is the case with the Clearwater Lake Punctate and François Punctate types; rather, fingernail pinches are the constant decorative element and are placed in a line, side by side or alternating with punctates, with no space left between decorative elements (Figure 4.7b, d). The pinches generally occur less than 10 mm apart and range from prominent to slight. Punctates, when present, are large (over 5 mm in diameter), range from oblong to round, and are spaced less than 10 mm apart.

Two pots display fingernail pinches exclusively on the angle (Figure 4.7c) while two others display fingernail
pinches over punctates (Figure 4.7a). One of the pots with both design elements has oblong punctates, where one punctate occurs below each punctate. The depth of the punctates resulted in very prominent bosses. The pinches occur above the apex and the punctates on the underside of the apex or the very upper reaches of the neck. The second such pot has one punctate impressed below each two fingernail pinches. The punctates are round and produce slight bosses. The pinches occur on the apex or slightly below it, and the punctates on the very upper reaches of the neck.

Three vessels display fingernail pinches alternating with punctates along the rim angle (Figure 4.7b); in each of these cases there is no space between the decorative elements. Two pots have the line of decoration occurring above the apex, where the punctates are round and deeply impressed. The third vessel has the line of decoration occurring above the apex with the punctates taking an oblong shape, producing prominent but flattened bosses. The pinch mounds are also tall and narrow.

The exterior surfaces of each of these vessels have been treated with smoothed fabric or textile impression. The impressions are uniform and tight, not linear or vertically aligned, and smoothing ranges from slight to nearly obliterating, even on the same vessel. The rim is commonly very heavily smoothed while the neck is usually the least smoothed zone. Of the seven pots three have
textile impressions on their lip surfaces, which are heavily smoothed.

The interiors of the vessels are all smoothed, some to the point of being polished or burnished. With the exception of one vessel, all the pots have horizontal wiping marks present on the rim interiors. Only one vessel exhibits carbon residue, which is present on the interior as well as on the exterior surfaces. One pot is unique in that it appears to have a red ochre wash on the interior surface.

The paste of these vessels seems to be of higher quality than that of the Clearwater Lake Punctate type vessels in that, while exhibiting lamination, exfoliation is not present in the sherds. The paste is quite dense and crisp. Some of the sherds are oxidized throughout, some have firing clouds, and others have oxidation rims with reduced cores. The lips on these pots tend to be thicker than on the Clearwater Lake Punctate type vessels, with several lips achieving a thickness of over 1 cm thick. The rim angles range from 10.3 to 15 mm thick.

Temper is made up exclusively of coarse grit consisting of high amounts of feldspar and quartz, up to 8.3 mm in length (an average maximum size is closer to 3.5 mm), and is present in sparse to moderately high amounts.
4.3.2.2 Non-Selkirk Ware Ceramics

Several vessels from the Ice House site display traits unusual for Selkirk ware, similar to what was found at the Bernadette Chartier site. Due to the near complete lack of records relating to the stratigraphic positions of these ceramics in the archaeological record it is difficult to ascertain if they were associated with the Selkirk ware or not. However, if they belong to the Narrows Assemblage, they probably originated from an earlier component.

There are 21 vessels which are not Selkirk ware. Very little reconstruction was carried out due to the highly fragmentary nature of the sherds, and several pots are represented by very small lip sherds.

Three profile types are present in this sample (Figure 4.3). Eight pots, all decorated, display a vertical upper neck and gentle to marked neck constriction (Figure 4.3c, d). The upper neck zone is quite tall, with seven vessels exhibiting heights between 20.0 and 39.9 mm. Nine pots display vertical upper neck sherds with no evidence of a neck constriction (Figure 4.3a, e, f). These are decorated as well, with the exception of pots represented by very small sherds. It is difficult to gain a good understanding of the profiles due to a lack of reconstruction. Three pots, all decorated, appear to have short excursive or outflaring upper necks (Figure 4.3b). However, only one pot is represented by sherds large enough to confidently support this interpretation. The shoulder sherds from this
sample were all rounded in profile and rarely exceeded 12 mm in thickness.

All of the vessels in this collection display some degree of flattening and smoothing of the lip surface, ranging from slight smoothing to scraping. Irregularity in lip manufacture is common and, as a result, there is a diversity in the lip shapes in this sample. Clay has been incompletely smoothed to the wall surfaces in seven cases giving the lip a pulled-over appearance; lips expand to the exterior in five cases and to the interior and exterior in two cases. One vessel has a rounded lip, two have square lips, two are subrounded, and three have flattened but tapered lips. The lips are generally less than 10 mm thick, and do not exceed 12.5 mm.

Punctates occur on fifteen vessels in two variations - either round or oval (ten cases), or in a 3/4 circle-shape (five cases) (Figure 4.4a, b, c). Two pots had small punctates of indeterminate morphologies. Size and spacing of the punctates also occurred in two groupings - large and widely spaced (minimum 5.6 mm diameter, 25 mm apart) in seven cases, and small and closely spaced (maximum 4.0 mm diameter, 26 mm apart) in ten cases. Large round punctates occurred on six pots, while the small variety occurred on four pots. The 3/4 circle-shaped punctates were large in one instance and small on four pots.

The punctates were applied imprecisely in a number of cases, varying noticeably in distance below the lip. Ten
pots had punctates less than 15 mm below the lip, while seven had punctates between 15 and 25 mm below the lip.

The only other decoration present in this sample consists of single twisted-cord impressions on the upper neck just below the lip in two cases, with each pot also exhibiting 3/4 circle-shaped punctates (Figure 4.4d). A third group, of four pots, did not display decoration, possibly due to small sherd size.

Surface treatment throughout the sample consisted of smoothed textile impressions, varying in the coarseness and orientation of the individual impressions. Vertically aligned impressions occurred in seventeen cases and uniformly shaped impressions occurred in three cases. Smoothing tended to be heavy, though in some cases the impressions remain prominent. Impressions carried onto the lip surface in eleven pots.

Sandy paste, or the use of sand and coarse rounded pebbles as a tempering agent, is common. Unlike the Selkirk ware sample, grit temper is not common, occurring in only four pots. The paste is soft, light and porous in the majority of cases. Reduced cores with often thick oxidation rims are common, although two vessels are reduced throughout. Exfoliation occurred in four pots.

4.4 The McCusker Lake Site (GhOe-1)
4.4.1 Previous Research

This site was first identified by Martin Chartier, an avocational archaeologist from Buffalo Narrows. Chartier (1980:11) was involved in fire suppression duties in the Primrose Air Weapons Range when helicopter activity cleared surface debris from the banks at the head of the McCusker River. Lithic tools and flakes were collected on the surface and in several test pits by Chartier and his cousin, Thomas Chartier, along with "[n]umerous pieces of pottery...resembling Clearwater Lake pottery" (Chartier 1980:11).

Partial ceramic reconstructions were later completed and the vessels were described and reported on by Brian Smith (1984). He noted that, though retrieved from uncontrolled survey and testing, the pottery was typical of Selkirk ware. While Smith (1984:33) identified the assemblage as part of the Pehonan complex, the sample demonstrates attributes which better match pottery from the Buffalo Narrows region.

4.4.2 McCusker Lake Site Ceramics

A total of six vessels, represented by numerous rim sherds, are found in this collection. Four of the six pots can be separated into different types based on morphology and decoration; the sixth vessel is represented by a sherd too small to confidently type.
4.4.2.1 Clearwater Lake Punctate type

This type is represented by two pots. One vessel has a vertical upper neck decorated with a single line of small (3.5 mm) round, deeply impressed punctates which raise prominent bosses on the interior surface. The punctates are spaced 12.5 mm apart and are 8 mm or less below the lip. The lip is square but undulating and somewhat irregular, and displays a smoothed textile impression. The second vessel appears to have an incipient S-shaped rim decorated on the apex by a row of deeply impressed punctates, 26 mm below the lip. The lip is undecorated, has smoothed textile impressions, expands slightly to the interior, and the corners are burnished.

In both cases the exterior surface exhibits a smoothed to very smoothed textile impression, though in the former case the exterior surface is largely exfoliated. The interior is smoothed on both pots, highly so on the latter pot. The paste is tempered in both cases with sparse to moderate amounts of grit up to 3 mm in size. However, the sherd which exhibits exfoliation is light and reduced throughout, while the sherd with the S-shaped rim has reduce, compact, dense paste.

4.4.2.2 François Punctate type

This pot has been partially reconstructed, is very large (26 cm inner lip diameter), and remarkably similar to a pot described from Jacobsen Bay (see Smith 1984:32-33,
36-37). It exhibits a strongly excurvate upper neck, constricted neck, and markedly angular (≈105°) shoulders. The lip is subrounded in shape, displaying a heavily smoothed textile impression. Decoration consists of alternating CWI impressions on the inner and outer lip corners, giving the lip surface a sinuous appearance. Oval, deeply impressed punctates occur on the upper neck which raise prominent bosses on the interior. The punctates are 4 mm in diameter and spaced less than 5 mm apart.

Crushed grit temper has been applied to the exterior surface, most noticeably from the neck constriction down. This is much like one of the possible Clearwater Lake Punctate type pots from the Ice House site.

The exterior surface displays a uniform, but variably smoothed, textile impression. The interior has horizontal fine striae suggestive of smoothing or wiping, carried out to the point of being polished. Cooking residue is present along the interior of the shoulder. The paste is well consolidated and the walls thin, with little evidence of exfoliation. It is reduced throughout, with some firing clouds on the exterior. Temper consists of moderately high amounts of coarse grit up to 5 mm in diameter.

4.4.2.3 Alexander Fabric Impressed type

This pot displays a slightly outflaring upper neck, a gently constricted neck, and a total lack of decoration.
The lip is expanding on both corners, flattened, and has a smoothed textile impression. The exterior surface has a prominent, smoothed, uniform textile impression. The interior is wiped and displays some horizontal striae and carbon residue.

The paste is quite well compacted with no evidence of exfoliation. The core is reduced and the surfaces oxidized. Temper consists of moderate-high amounts of coarse crushed grit to 3.9 mm in size.

4.4.2.4 Kisis Angled Rim type

This vessel was originally classified (Smith 1984) as a François Punctate type vessel exhibiting elaborate and complex shoulder decoration. However, upon re-examination, it has become apparent that the decorated zone is actually an angled rim.

The lip expands to the interior, with nearly obliterated textile impressions on the surface. Lip decoration consists of diagonal CWT impressions alternating on the lip corners in a converging manner (Figure 4.6b). The orifice diameter is between 19.6 and 21 cm. The rim is very straight and insloping with the inflection occurring 34 mm below the lip. The rim angle is decorated with alternating fingernail pinches and deeply impressed oval punctates with flattened bosses on the interior (Figure 4.7b). The fingernail pinch mounds are prominent and occur below the inflection point.

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The exterior surface displays heavily smoothed, uniform textile impressions. The interior has thin, horizontal smoothing or wiping striae. The paste is compact, oxidized on both surfaces with a reduced core, and temper consists of sparse amounts of coarse grit up to 7 mm in size.

4.4.2.5 Miniature Vessel

The sixth vessel is represented by a lip sherd too small to allow for classification, but which appears to originate from a miniature vessel because of its extreme thinness and the degree of inner lip curvature. The lip surface is completely smooth with an exterior flange and is decorated with two CWT impressions oriented in a 'V' shape. A constriction immediately below the exterior lip corner may reflect finger squeezing to form the pot during the manufacture process.

No surface treatment was recognized due to the size of the sherd. The paste, which is oxidized throughout, is fairly well compacted with no evidence of exfoliation, and is tempered with coarse grit in sparse amounts.

4.5 Ile-à-la Crosse - Sandy Point Site (GiNw-2)

The Sandy Point site was identified in 1964 in a garden at Ile-à-la Crosse, approximately 100 m from the shore. The southeasterly trending peninsula is quite low lying, with the shoreline fringed with bushes, willows and long grasses.
4.5.1 Kisis Angled Rim Type

This assemblage includes a lip to upper neck sherd which has a decorated angled rim. The lip is slightly sub-rounded, and has been textile-impressed prior to smoothing. The lip has been decorated with a SET, where the impressions alternate from one corner to the next, producing closely spaced, vertical impressions (Figure 4.6h).

The rim height is approximately 34 mm. Unlike the other angled rim vessels, the rim is somewhat excursive rather than straight or slightly convex. The inflection is decorated with large, closely spaced, oval punctates, and is lacking fingernail pinches (Figure 4.7d). These punctates have been impressed up and in, but not very deeply, resulting in a lack of bosses. Thus, the rim angle is relatively thin. The angle itself is sharp, but not highly pronounced and the rapidly thinning neck is gently constricted.

The exterior surface displays a uniform textile impression which has undergone varying degrees of smoothing. The exterior of the rim exhibits heavy carbon deposits which also occur on the interior of the pot at the level of the rim angle. The presence of deep horizontal striae on the interior of the pot is suggestive of wiping or brushing.
The paste is quite dense and there is no evidence of exfoliation. The temper consists of sparse-moderate amounts of coarse grit.

4.6 Selkirk Ware in the Project Area

Several Selkirk pottery types were recognized from the project area, three of which have been described previously in the literature, and one of which has not. The vessels do not, for the most part, deviate markedly from similar assemblages elsewhere in the province with the exception of the presence of nine pots with angled rims.

The Clearwater Lake Punctate type was well represented, comprising 22 of the 38 Selkirk ware pots. The pots ranged in size from small (9.5 cm orifice diameter) to very large (27 cm orifice diameter). The pots had globular bodies, round to prominently round shoulders, gentle to markedly constricted necks, and vertical to outflaring upper necks. Two traits are noteworthy for this type. The first is the presence of grit temper applied to the surface of one vessel (Ice House site) as decoration, a trait almost unique to Upper Churchill River Basin materials. This pot has been classified as a 'possible' Clearwater Lake Punctate type pot because of incompleteness. However, because it lacks an angular shoulder it cannot be included in the François Punctate type (cf. Smith 1984; Wilson 1982). This is the first case
in which surface grit is expressed in a Clearwater Lake Punctate type vessel.

The second is the paucity of lip decoration. If all the verified and possible pots of this type (22) are taken into consideration, only nine have any decoration on the lip. There are seven pots with CWT impressions applied to both lip corners. On an eighth pot, jagged tool impressions were made on both lip corners in a converging manner. Finally, a ninth pot has inner lip corner smooth tool impressions. This is in contrast with assemblages from the Churchill River in northeastern Saskatchewan which, as Meyer (1978a: 29) states "the details of lip decoration have been elaborated to an unusual degree" to include punctates, square-edged tool impressions, incised lines and CWT impressions.

Punctates were impressed on the neck constriction or upper neck on all of the verified Clearwater Lake Punctate type pots, and were round or oval in all but one case, which exhibited \( \approx 3/4 \) circle-shaped punctates. Ten pots had small punctates (less than 4 mm in diameter), three had medium punctates (4 - 5 mm in diameter), and five had large punctates (greater than 5 mm in diameter). In all measurable cases the punctates are spaced less than 20 mm apart. Bosses are slight to pronounced in prominence.

Surface treatment consisted of smoothed, uniform textile impressions in sixteen cases, while smoothed vertically-oriented textile impressions occurred in four
cases. Interiors were commonly smoothed, exhibiting wiping striae, and carbon residue was present on several pots. Paste was often laminated, and in several cases, had a tendency to exfoliate. Temper consisted of coarse-sized grit in sparse to moderate amounts.

Alexander Fabric Impressed type pots were very poorly represented with two, possibly three, such vessels recovered. The fragmentary nature of the sherds assigned to this type might hide the presence of decoration on these pots, which would re-align their affiliation. In two cases the surface treatment consisted of smoothed, tightly made, vertically-aligned textile impressions, and in one case of smoothed tightly made uniform impressions. Impressions carry onto the lip surface on two pots.

François Punctate type pots were also poorly represented. In only one case, from the McCusker Lake site, could the shoulder to lip profile be reconstructed, while there appear to be two vessels represented by angular shoulder sherds from the Ice House site. In all cases the shoulders were undecorated. The vessel from the McCusker Lake site is large and well made, is decorated with a line of punctates on the upper neck and alternating CWT impressions on the lip, and has an outflaring upper neck and a markedly angular shoulder. Grit was applied to the exterior of the pot while damp. The shoulder sections recovered from the Ice House site were sharply angular (though not as sharp as in the above case), highly smoothed.
on the apex, and thickened in relation to the body and upper shoulder regions.

Contrary to the suggestion made by Smith (1984) and Scanlon (n.d-a), complex decoration was not applied to angular shoulders from the Ice House and McCusker Lake sites. These inflections were, in fact, angled rims decorated with pinching and/or punctates and have been found at several sites in the study region. Their identification has prompted the recognition and description of the Kisis Angled Rim type. There appear to be four varieties of this type based on variation in rim angle decoration. This follows Clarke's (1968:190) concept of a polythetic set. One variety has fingernail pinches on the angle, the second has punctates on the angle, the third has fingernail pinches alternating with punctates on the angle, and the fourth has fingernail pinches above punctates on the angle.

Approximately one-quarter of the Selkirk pots exhibited a decorated angled rim. These (generally) large pots display a measurable rim, demarcated by an inflection between the neck constriction and the lip. The inflection point is decorated in each case. Fingernail pinches are the most common decorative element on the vessels, not punctates as in the Clearwater Lake Punctate type. However, fingernail pinches do co-occur with punctates on a majority of pots. A summary of traits for these vessels is as follows:
-lip shapes include square, interior bevel, and interior-expanding (which may be flat to slightly subrounded).

-lip decoration was found on 7 of 9 vessels and consists of:
  i) CWT impressions on the exterior corner;  
  ii) CWT impressions alternating on both corners following the same diagonal orientation;  
  iii) CWT impressions alternating on both corners in a chevron pattern or converging manner;  
  iv) smooth tool impressions on the exterior corner;  
  v) incised lines across the lip surface;  
  vi) SET impressions on the exterior lip corner;  
  vii) SET impressions alternating on the lip corners.

-wide orifice diameters; half of the measurable orifices are over 20 cm, two are between 15 and 20 cm, and one is less than 15 cm in diameter.

-tall rims, greater than 30 mm in six cases and less than 20 mm in two cases. An overall range of 15 to 44 mm.

-very straight rim curvatures, though slightly convex or concave curvatures are present.

-rim angle decoration consisting of:
  i) fingernail pinches (2 of 9);
ii) fingernail pinches alternating with round or oval punctates (4 of 9);
iii) fingernail pinches over round or oval punctates, forming two lines of decoration. The punctates occur either one per pinch or one per two pinches. (2 of 9);
iv) oval punctates (1 of 9);
-punctates are less than 5 mm in diameter in all cases but one, and spaced less than 10 mm apart.
-rim angle decoration does not appear to covary with lip decoration except that CWT impressions occur only on those pots with both fingernail pinching and punctates on the rim angle.
-rim angle is thickened; the neck is commonly thinner than the rim angle and rim proper.
-tight to gentle neck constriction; the point of maximum constriction occurs almost immediately below the rim angle.
-rounded but very prominent shoulders.
-uniform, tightly fashioned textile impressions over the exterior surface, smoothed to varying degrees. This extends onto the lip surface in half of the cases.
-smoothed or wiped interior surface, leaving horizontal striae. Ochre wash and carbon residue present, but uncommon.
-sometimes laminated, but quite well compacted, paste which is tempered with moderate to fairly high amounts of coarse grit.

While the McCusker Lake site and the Sandy Point site ceramic assemblages are not large by any means, they are important in that they provide evidence that the pottery assemblages found in the Buffalo Narrows sites are not isolated occurrences. The assemblages display nearly the full suite of characteristics described from the Kisis Channel sites, remarkable considering only seven vessels are present. In addition, they exhibit traits not previously noted.

The Kisis Angled Rim type vessel from the McCusker Lake site is remarkably similar to the large vessel reconstruction from the Ice House site, and it would not be surprising if they were made by the same potter. The François Punctate type pot has a remarkably angular shoulder and grit temper applied as decoration to the exterior surface, which is a twin to the Jacobsen Bay pot from Anglin Lake (Smith 1984) (Figure 4.9). The decoration is similar to a Clearwater Lake Punctate type vessel from the Ice House site. It is possible that all three were made by the same potter or family of potters.

While it will take more investigation to determine if the traits and co-occurrences listed here represent the full suite of variation for the Kisis Angled Rim type, the
fact that it is recovered in a significant frequency in the study area suggests that it is a distinctive and diagnostic type.

4.7 Non-Selkirk Ware in the Project Area

Millar (1983) proposed the Narrows assemblage based on the presence of vessels with traits atypical of Selkirk ware at the Bernadette Chartier site. These vessels were potentially subconical, made from sandy paste, decorated with a line of punctates on the upper neck, exhibited interior anvil marks, and were fabric impressed on the exterior prior to being smoothed. These traits are recognized on 21 vessels in the ceramic assemblage from the Ice House site and two vessels from the Bernadette Chartier site, supporting the premise that a second ceramic ware was being made in the Kisis Channel region.

The lip shape, thickness, and craftsmanship is highly variable, even on one pot. Lip decoration is totally lacking in the sample. However, punctates decorate almost all of the pots, and the punctates take one of two forms - either round or 3/4 circle shaped. The motifs designed with these punctates also take two forms - either small closely spaced punctates or large widely spaced punctates. Bosses, when present, ranged from low to pronounced. The only other decoration on these vessels consists of single twisted-cord impressions, imprecisely applied just below the lip on two pots. Five vessels were undecorated, but in
four cases were represented by very small sherds which may have originated from decorated pots.

Vessel shape is not well known due to a lack of large-scale reconstructions. It does appear that vertical or slightly excurvate upper necks, constricted necks, and rounded shoulders occur, as do pots with very gentle curvatures or potentially conical profiles. One miniature vessel has a slightly outflaring upper neck and angular shoulders.

These pots have surface treatment occurring primarily as vertically-oriented textile impressions which range from tight and small to coarse and loose, though in a few cases a more uniform textile impression is present. Smoothing can range from almost negligible to nearly complete, even on the same pot. Several vessels exhibit anvil depressions on their interiors. However, there do not appear to be any changes in direction of the textile impressions which would relate to the use of a textile wrapped paddle. The interiors also vary widely in their treatment, with several having a rough, or very lightly smoothed appearance whereas others are well smoothed or display obvious wiping marks.

The majority of the sample has paste which is soft and sandy and does not have a tendency to exfoliate. A minority of the sample has laminated paste more of a tendency to exfoliate and which is tempered with coarse grit. Several vessels have oxidation rims, sometimes over 1mm thick, though sherd cores are commonly reduced,
suggesting variability in firing atmospheres and temperatures.

4.8 Summary

Two wares are present in the study region, one of which conforms to Selkirk ware and one of which is anomalous in the boreal forest of northern Saskatchewan. The Clearwater Lake Punctate, the François Punctate, and possibly the Alexander Fabric Impressed types of pottery are represented in the Selkirk ware. The first two types are distinctive compared to assemblages from outside the study area because of a general paucity of decoration. As well, grit applied to the damp surfaces of pots of these types at the McCusker Lake and Ice House sites are traits almost unique to the project area.

The most noteworthy ceramic recovery is a previously undescribed Selkirk ware type, the Kisis Angled Rim type, which displays a decorated angled rim. The greatest number of these well-made and generally large pots is from the Ice House site, but they also appear at two other sites in the region, McCusker Lake and Sandy Point. It is felt that the presence and distribution of this type reflects a modification of Selkirk ware styles.

Non-Selkirk ware, possibly plains-related, represents a large portion of the ceramic collection from the region. Many pots reflect poor craftsmanship, and are sparsely decorated with round or \( \approx 3/4 \) circle-shaped punctates and
single cord impressions. Known profiles include forms with upright or slightly excursive upper necks, constricted necks, and rounded shoulders. The paste is sandy in a majority of cases, though grit tempers some vessels.
5.0 Comparisons with Old Women's Phase Pottery and Mortlach Phase Pottery

5.1 Introduction

Meyer (1981, 1984) proposed that several of the decorative and morphological traits on Pehonan complex pottery from the Nipawin region might have resulted from interaction with and influence by plains groups who frequented the parklands of east-central and eastern Saskatchewan. The Selkirk pottery from the Ice House, McCusker Lake, and Sandy Point sites also reflects similar influences.

The recovery of pottery atypical of the boreal forest from the Ice House site has supported previous suggestions that a plains pottery tradition, represented by the Narrows assemblage, was present in northwestern Saskatchewan. Unfortunately, while Millar (1983:113-114) surmised that the "plains characteristics may be overlays, the ceramics, point styles and other attributes resulted from acculturative influences from the plains" little effort was expended to establish a more precise relationship with plains archaeological constructs.
5.2 The Narrows Assemblage Pottery and The Old Women's Phase

The 1981 survey report for the Ice House site states that the ceramic "varieties present could be related to the late prehistoric period on the northern plains" (Millar and Ross 1982:52). Additionally, Millar and Ross (1982:51) suggested that small side-notched projectile points from several survey sites were comparable to those of the Old Women's phase. The largest sample of non-Selkirk ceramics comes from the Ice House site. The association of these ceramics with other artifacts is not known due to a lack of planviews and stratigraphic or profile records. These vessels are similar to those from the Bernadette Chartier site based on similar decorative, morphological, and paste characteristics which occur, stratigraphically, below a Kisis complex component. Thus, it is assumed that the vessels from the Ice House site are reminiscent of an earlier ceramic tradition in the study area.

The Kisis complex is the most recent precontact archaeological construct in the study area, possibly dating as early as A.D 1300 or 1400. The Narrows assemblage was deposited before this. A Middle Taltheilei component, dated to 1275+/-75 years B.P. (Millar 1983:128) (calibrated maximum age B.P. at two sigma - 1320, and minimum age B.P. at two sigma - 1050 [Morlan 1993:35]) at the Martin Chartier site (Millar 1983:94), occurs below the Narrows assemblage at the Bernadette Chartier site. Thus, as a
rough estimate, the makers of the Narrows assemblage could have resided in the Buffalo Narrows area between 1050 and 1320 years B.P (Morlan 1993:71), or A.D 630 to 900, and A.D 1300 or 1400. This is approximately the same time frame that the Old Women's phase was present on the Saskatchewan plains and, thus, requires a comparison between the two.

5.2.1 The Old Women's Phase

The basis for the Old Women's phase (OWP) is the association of Prairie and Plains side-notched points with pottery, originally classified by Byrne (1973) as part of the Late Variant of the Saskatchewan Basin complex (SBC) (Meyer 1988:56). Originally the term 'Old Women's phase' was applied to assemblages which contained small side-notched arrow points. However, it was later recognized that these assemblages also contained Late Variant SBC pottery (Byrne 1973:467-469; Reeves 1983:20).

Much like the Selkirk composite, the Old Women's phase is geographically and temporally extensive, and it may be possible to divide it into temporally and regionally segregated variants (Reeves 1983:20). Unfortunately, there are no wares or types defined for this entity, making it difficult to discuss regional variation and interaction. This lack of a standardized terminology has led to the application of numerous nomenclatures to one technology (Green 1993:15).
In Saskatchewan this tradition lasted from approximately A.D. 800 to 1300, but until the very late precontact or protohistoric period in Alberta and Montana (Greg 1985:131; Meyer 1988:56-57). Sites containing this pottery are common in south-central and southwestern Saskatchewan, but are uncommon in southeastern Saskatchewan. There is a very limited distribution of Old Women's phase sites in the northern part of the parkland and they are found rarely in the southern edge of the boreal forest (Meyer 1988:61).

These people were skilled communal bison hunters, and fashioned their lithic implements primarily out of local materials. They utilized the split pebble and bipolar techniques to produce blanks for tools such as end-scrapers and projectile-points (Reeves 1983:19). Prairie side-notched points are associated with OWP pottery prior to A.D. 1300; after this date, Plains side-notched type points become more frequent (Adams 1976:18; Meyer 1988:56-57; Morgan 1979:263-266; Reeves 1983:20).

After approximately A.D. 1300 the OWP was supplanted by the makers of Mortlach phase pottery in the region (Meyer 1988:60). However, Meyer (1988:60) points out that the west-central region of Saskatchewan might have remained part of the OWP territory as indicated by the lack of Mortlach pottery in surface collections from the area.

In central Saskatchewan OWP pottery rarely extends north of the parklands. However, the parklands themselves
were exploited. Several winter sites in the Saskatoon area have produced OWP pottery suggesting that these pottery making people were "well adapted to life on the edge of the parkland" (Wilson 1984:25). This seems, however, to be at the northern reaches of its distribution in the province.

5.2.2 Saskatchewan Recoveries of Old Women's Phase Pottery

Several excavations in the plains and parklands of Saskatchewan have produced OWP ceramics. The ceramics were quite similar, and the sites have produced radiocarbon dates which fall into a relatively tight time period. For instance, the Tschetter site was dated to 1005+/-75 years B.P., 1020+/-100 years B.P. and 915+/-45 years B.P. (Linnamae 1988:115), the Newo Asiniak site was dated to 915+/-70 years B.P. (Kelly 1986:139), the Hartley site was dated to 1120+/-60 years B.P (S-3382) (Meyer personal communication 1995) and the Lucky Strike site was dated to 1020+/-90 years B.P. and 875+/-95 years B.P. (Wilson 1984:11-12, 24).

Ten vessels were excavated from the Garratt site, on the outskirts of Moose Jaw. Morgan (1979:198-199) reports that the vessels display outflaring, insloping, or vertical upper neck profiles. The lips are commonly thickened and flattened while the shoulders are angular. The surface treatment consists entirely of vertically oriented cord-marking. The zones commonly decorated on the vessels are

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the lip and the shoulder. Cord-wrapped tool impressions occur on the lip and/or shoulder in vertical, diagonal, and chevron designs. Punctates or smooth-tool impressions were made on the lips of some pots while incised marks were made on the lips of other vessels in vertical or zigzag motifs (Morgan 1979:302-314).

The Tschetter site, west of Saskatoon, produced five vessels which are decorated in three instances. Decoration consists of CWI impressions on the lip and upper neck in diagonal, converging, or horizontal applications, and diagonal SET impressions or incised marks. The vessel lips are thickened, expanding, and flattened (Prentice 1983:128-132). The paste is blocky, at times crumbly, tempered with sparse to high amounts of coarse-sized grit, and laminated with a tendency to exfoliate in several cases. Conical and complex vessel profiles were recognized (Linnamae 1988:112; Prentice 1983:128-132).

Just north of Saskatoon, a component producing OWP pottery at the Newo Asiniak site in Wanuskewin Heritage Park was dated to 915+/-70 years B.P. (Kelly 1986:139). The sherds are thick, heavily oxidized, exhibit fabric-wrapped paddle impressions, and are decorated with a single row of punctates on the upper neck, and impressions (unknown form) on the lip surface (Kelly 1986:133). Overall, the "style, paste and temper type and general morphology of the ceramics is...supportive of a Late Prairie Side-Notch cultural affiliation" (Kelly 1986:61).
Meyer (1988:58-59) recognized that pottery at the Morris Church site near Chamberlain, the Walter Felt site near Mortlach, and the Gull Lake site near Gull Lake also displays traits similar to those discussed for the above mentioned sites. Thus, the profiles, decorative attributes, paste characteristics, and exterior surface treatments are fairly uniform in Saskatchewan assemblages.

Pottery from Saskatoon area surface collections, such as in the Vigfusson and Cronk collections, and salvage recoveries, such as the Tipperary Creek pot, also display OWP pottery traits. For instance, the latter pot has a cord-roughened exterior, angular shoulders, a flat base, CWI impressed lip decoration, and thick, exfoliating walls (Green 1993:19-21). However, the lack of contextual control for artifacts recovered through collection and salvage activities often leaves room for speculation regarding precise cultural affiliation (Green 1993:24).

The pottery from two sites in south-central Saskatchewan, roughly 120 km southwest of Saskatoon was examined for purposes of comparison with that from the study area. The Sherwin Campbell site (Eg0a-5), located south of Elrose, was collected through controlled surface survey, and the second site, (Eh0c-2), tentatively placed in the vicinity of Wartime (east of Elrose), has been catalogued and housed at the University of Saskatchewan.

The Sherwin Campbell site produced 18 OWP pots. The majority of the lip and upper neck sherds are very thick,
at times approaching or exceeding 20 mm. Lips are primarily flattened and thickened, or pulled-over, to the exterior with lesser numbers of expanding, square and bevel lip shapes. In ten cases the lip surface displays smoothed textile impressions or cord-roughening. In eight cases the upper neck was oriented vertically, in two cases the upper neck was excurvate, and in three cases the upper neck was insloping-concave. One vessel profile was partially reconstructed and exhibits a short, slightly excurvate upper neck, a gentle neck constriction and a gently rounded shoulder.

Decoration was present on seven vessels. Cord-wrapped tool impressions were the most common element, found on four vessels, followed by one expression of punctates, one of sharp-tool impressions or incisions, and one of twisted-cord impressions. The decoration was applied to some part of the lip in each case. Cord-wrapped tool impressions were found on below-neck sherds, and in one instance were applied in a chevron pattern.

Surface treatment consists of smoothed textile impressions in fourteen cases, cord-wrapped paddle impressions in two cases, and plain in one case. The interior surfaces were commonly wiped or brushed and carbon residue was often present. The paste was sandy in several instances, but large grit (up to 13 mm in size) was the most common tempering agent, present in sparse to moderate
amounts. Several pots were laminated with a tendency to exfoliate.

These vessels compare well with the Garratt site assemblage in terms of profiles, lip morphology, decoration, and paste characteristics. The chevron pattern CWI impressions below the neck, discussed above, is a motif applied to the upper shoulder of a vessel at the Garratt site. However, whereas most of the Garratt site ceramics were treated with cord-wrapped paddle impressions, textile impressions dominate the Sherwin Campbell site ceramics.

Site EhOc-2, near Wartime, produced three pots. Shoulder sherds in the collection are angular, not rounded. The vessels reach a thickness of almost 20 mm. The lips are all flattened, one to the point of being concave. One pot has a lip which is thickened or pulled-over to the exterior, and the other two have sharp lip corners. All display a prominent textile impression on the lip. One vessel displays two short cord impressions on the upper neck region which might relate to the impression of a tool widely wrapped with cords.

The upper neck is short in all cases, and the neck constriction is gentle. The exterior surfaces bear a vertically-oriented textile impression while smoothing ranges from slight to heavy. The interior surfaces are smoothed, with carbon residue present in two cases. The paste is relatively fine, sandy in one instance, and ranges from quite well consolidated to laminated with a tendency
to exfoliate. Coarse-sized grit temper was added in moderate to high amounts.

5.2.3 Summary of Traits

Several traits are exhibited in OWP pottery from the Canadian, and, in particular, the Saskatchewan plains and parklands. These include:
- lips are flattened, and expand or were thickened to the exterior. In several cases, it appears that clay was pulled-over to form the lip surface, producing the thickening. Lips are often cord-roughened or textile-impressed;
- short, commonly straight or excursive upper necks;
- shallow to quite marked neck constrictions and angular or rounded shoulders;
- elongated globular to squat globular bodies, with rounded or flat bases;
- Cord-wrapped tool, SET, smooth tool, and twisted-cord impressions, incised marks, fingernail pinches, and punctate decorative elements. In Saskatchewan CWT impressions are the most common element;
- decorative elements applied most commonly on the lip surface or corners, but may extend to the shoulder oriented horizontally, obliquely, or in chevron patterns;
-vertically-oriented cord-roughened or textile-impressed surface treatments with minimal to very heavy smoothing;
-interior striae, anvil depressions, and carbon residue are common;
-coarse, crumbly, often laminated paste which is sometimes sandy. Temper is large to gross-sized grit, present in sparse to large amounts. Vessel wall thickness approaches 20 mm in several cases.


5.2.4 Northern Occurrences of Old Women's Phase Pottery

Old Women's phase "components...are not known from more northerly regions" (Meyer and Epp 1990:333) with few pieces of this pottery located north of the parklands (Meyer and Hamilton 1994:122). It appears that "[t]he forest edge was evidently a zone of secondary occupation" (Meyer and Epp 1990:334), and the uncommon occupation of this region was temporary when it did occur. The lack of OWP pottery in the area might "indicate that contact between northerners and southerners was avoided" (Meyer and Epp 1990:334). The only published northern OWP component, at the Willis Creek site (FhNc-103) in the Nipawin region, produced a Prairie side-notched point and a small number of pot sherds (Meyer and Epp 1990:333).
However, Late Variant SBC pottery has been identified from northeastern Alberta (Learn 1986:39-45, 56). A reconstructed vessel from Black Fox Island, in Lac La Biche (site GfPa-32), closely resembles pottery associated with the OWP in southern Saskatchewan (compare, for instance, Learn 1986 to Morgan 1979). It exhibits a flat and thickened or pulled-over lip decorated with oblique (CWT?) impressions, large and widely spaced punctates on a short constricted neck, an angular thickened shoulder, vertically oriented textile impressions over its exterior surface, and laminated paste tempered with coarse grit.

This vessel was felt to have arrived at the site through intermarriage or trade, with the suggestion that the southern edge of the boreal forest might have been a secondary use-area for plains pottery makers. Learn (1986:9) points out that this pottery sample is not "an isolated instance of ceramics in north-central Alberta", citing small ceramic recoveries at Calling Lake (GhPh-107) and at Cold Lake Provincial Park (GcOm-7).

Sites excavated by Forsman (1976) from the Montreal Lake study area in central Saskatchewan produced an abundant amount of Selkirk pottery. However, at a single component site (GcNj-7), a miniature Selkirk ware pot was found associated with one OWP pot (Paquin 1993b:31). This vessel displays angular, thickened shoulders, an upright upper neck decorated with large and widely spaced punctates, a flat base, highly laminated and exfoliated
paste which is sparsely tempered with coarse grit, and vertically-oriented textile impressions (Paquin 1993a).

These pots compare favourably with a partially reconstructed pot recovered at a surface site (FgNe-3) near the northern edge of the parklands in the Gronlid area (Meyer and Epp 1990:333). It has an upright upper neck decorated with punctates along with diagonal incisions on the lip surface and angular shoulder.

5.2.5 Comparisons to Project Area Non-Selkirk Ware

The presence of ceramic materials in the project area which are connected to a plains pottery tradition is problematic. This is particularly true since it is unknown to what degree plains groups penetrated the forest in western Saskatchewan due to a lack of research in the area, and through which avenue they entered the study area.

Due to the fragmentary nature of the sherds in this sample and the incompleteness of vessels, there are at least six non-Selkirk ware pots which cannot be confidently classified. Beyond stating that they are atypical for Selkirk ware, little more can be proposed for their affiliation.

The remainder of the sample, fifteen vessels, bear a resemblance to the ceramics of the OWP. There are several attributes in this pottery sample which are shared with the OWP and would support an affiliation with this plains pottery-making entity. These vessels have walls of,
sometimes highly, variable thickness. This occurs from one zone to another and, often times, within the same zone. It is not uncommon to find depressions on the exterior surface (handling marks?) and anvil depressions on the interior surface of these pots. Surface texturing occurs in the form of textile impressions and the individual impressions are vertically aligned. The textile impressions' weave ranges from loose to tight while the individual cords range from thin to coarse.

The lips are often irregular in thickness and evenness, and the profile can vary on the same vessel. It is not uncommon for the lips to be flattened and expanding or pulled-over. The lip surfaces are, at times, treated with textile impressions of varying degrees of smoothing, while in some cases there is no visible impression. Those vessels which could be reconstructed to some degree have profiles which consist of upright or excurvate upper necks with short, constricted necks and rounded shoulders.

On the other hand, there are some characteristics in this pottery which are uncommon for OWP vessels from Saskatchewan, and might be regionally distinctive. Some smaller reconstructions lack curvature suggesting that these vessels might be conical. While medium and large grit temper is present in some vessels in sparse amounts, the vessels' paste is commonly sandy with few or no angular igneous inclusions. Grit tempering in the plains vessels

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is pervasive and the amount and size of the grit varies considerably. This is not the case in this sample.

Decoration is usually sparse on OWP pottery, but on these vessels there is a complete lack of lip decoration and CWI impressions. Conversely, while punctates are sometimes found on OWP ceramics this decorative attribute is pervasive in this sample and exists in large and small 3/4 circle-shaped and round states. The only other decoration consists of two cases of single twisted-cord impressions.

While the vessel walls are variable in thickness and are often undulating or exhibit depressions, they do not approach the thickness of plains OWP pots. Instead, they are much thinner and do not approach 20 mm in any instance. Generally, the lip and shoulder were the thickest vessel zones and they rarely exceeded 12 mm. While plains OWP pots are treated by cord-roughening, textile impressions, and fabric-wrapped paddles, or are left in a plain or smooth state, the only surface texturing which could be identified in this sample is a smoothed, vertically-oriented textile impression.

It appears that one ware is represented and only one type is recognized in this sample. It is comprised of vessels with vertical or excursive upper necks, gently to pronounced constricted necks, rounded shoulders, and decoration consisting of punctates a short distance below
the lip and the uncommon impression of a single twisted cord line above the row of punctates.

5.2.6 Comparison to the Project Area Selkirk Ware

Interaction between the makers of Narrows assemblage and Kisis complex pottery might have occurred in the Kisis Channel area. However, the Narrows assemblage at the Bernadette Chartier site was found beneath the Kisis complex component. The large sample of Narrows assemblage pottery at the Ice House site, as far as can be elucidated from the scanty records at hand, occurs in the same sedimentary layer as the Selkirk ware. However, the cultural stratigraphy at the site is compressed or mixed in several areas, with historic to Taltheilei period artifacts occurring in the same levels (Rollans 1992:12, 33). Yet, based on Scanlon's and Millar and Ross' (1982:49) profile drawings there is complex stratigraphy in other areas of the site.

An indication that the ceramics might be stratigraphically separated comes from Millar and Ross (1982:50). They state that "two as yet unidentified complexes are found in the lower part of the black organic sand", while the Kisis materials "were found in the upper parts of the black organic sand". It is not known, however, if the plains ceramics belonged to one of these two unidentified complexes.
While the OWP was displaced in central and eastern Saskatchewan after A.D. 1300, it might have remained in place in western Saskatchewan. This may have put the carriers of this technology in a position to meet with the makers of Selkirk ware. To confirm or deny interaction, however, sites with stratigraphically separated components will have to be identified. In lieu of instances which confidently secure a relative temporal position for Narrows assemblage ceramics, a comparison of attributes will be outlined to determine whether or not there was contact and influence between the makers of these wares.

Angular shoulders, and fingernail pinching applied to the shoulder are features noted for plains OWP pottery. These traits, however, are not found on the plains-like pottery from the study region. Instead, the Narrows pottery shoulder sherds are rounded and fingernail pinching is lacking on the vessels. Stratigraphically, Kisis complex and Narrows assemblages components are separated at one site for certain (Bernadette Chartier site), and possibly at a second site (Ice House site). This would suggest that the presence of angular shoulders and fingernail pinching on Selkirk ware pottery in the study region was not derived from interaction with the makers of the plains ware.

Conversely, there is a very high incidence of punctates on the plains ware, a trait normally associated with Selkirk ware. This is not completely unknown or
unusual. The sample of Old Women's phase pottery recovered from the parklands and (very infrequently) the southern boreal forest is relatively small, but it is commonly decorated with punctates. While there is no evidence that the makers of Narrows pottery and Kisis pottery had interacted, it is possible that, prior to the establishment of the Kisis complex in the study area, Selkirk and OWP potters were in contact and a certain amount of influence in pottery manufacture occurred. This influence might have resulted in the common application of punctates in the OWP pottery, and the development of a regional subphase.

5.3 Influences on the Kisis Complex: The Mortlach Phase

5.3.1 Overview of the Mortlach Phase

After A.D. 1300 the OWP in central and east-central Saskatchewan was replaced by an archaeological entity with ceramics typified by thin walled, well-made pots associated with Plains-side notched points. In her M.A. thesis Malainey (1991) considered the Mortlach phase was present only from the Qu'Appelle Valley south, with the Moose Jaw culture, typified by Wascana ware in the parklands to the north. However, Walde's (1994) recent Ph.D. dissertation presents a well supported argument for the recognition of a single Mortlach phase throughout this region, with northern and southern subphases. It is this latter approach which
is followed here (see also Meyer 1988; Meyer and Epp 1990; Syms 1977).

The Mortlach ceramic industry is "characterized by varied, good quality pottery" (Meyer and Epp 1990:335). While several assemblages have been labelled as "Mortlach", there has been a general lack of agreement on what, exactly, belongs in this industry (Meyer and Epp 1990:335). Some generalizations which Syms (1977:125) made about Mortlach pottery include the presence of well-made vessels with complex profiles which display a variety of surface treatments, and decoration consisting of dentate stamping, CWT impressions, punctates, incising, and pinching applied between the lip and the shoulder. The check-stamped exterior is consistently present, though it is never the dominant surface treatment in assemblages (Joyes 1973:60, 63; Syms 1977:125). The wedge-shaped rim profile is also definitive (Joyce 1973: 60, 63), and occurs in low numbers in almost every assemblage.

Mortlach vessels throughout the province share similar traits, but several traits are found in high frequency in central Saskatchewan. They include straight rim, S-profile, and angled rim vessels which display fabric-impressed, cord-roughened or plain exteriors. Decoration most often consists of CWT impressions, dentate impressions, notches, or punctates, occurring on the lip to the shoulder. Motifs composed of elaborate horizontal, vertical and oblique lines are common (Malainey 1991:iii,
366-367). The paste is tempered with fine to medium grit, though sand temper is known to occur (Malainey 1991:367).

Plains side-notched points are common in Mortlach components, while Prairie side-notched points occur in lower frequencies. These points are well crafted and, on the grasslands, from good quality materials (Walde 1994).

Angular shoulders on Mortlach pottery are felt to be a carry-over or influence from OWP pottery industries, and some decorative motifs are felt to originate from Middle Missouri traditions (Meyer and Epp 1990:335). There are several regional variants and wares within the Mortlach phase based on differences in profile and surface finish, one of which is located in the Saskatchewan parkland (Walde 1994:107). In any case, makers of a parkland variant would have had an opportunity to interact with southern Selkirk pottery-making peoples (Meyer, personal communication 1992).

5.3.2 Kisis Complex Pottery and Mortlach Phase Pottery

The makers of Mortlach phase pottery occupied the grasslands and parklands of Saskatchewan at roughly the same time that the makers of Selkirk pottery were in the boreal forest, between approximately A.D. 1300 and the time of first contact (Meyer 1988:60). Meyer (1981) proposed that some Pehonan ceramic traits were derived from interaction with Mortlach potters. It is suggested here
that Mortlach pottery makers also influenced Kisis pottery makers. Pehonan and Kisis ceramics are quite similar to each other, and several of the stylistic and morphological traits they display are commonly found on Mortlach pottery.

There is no doubt that there was contact between plains groups and forest groups in the southern boreal forest and parklands of Saskatchewan after A.D 1300. The Lozinsky site, in the parkland 80 km northeast of Saskatoon, is a good example of contact and influence between makers of Selkirk and Mortlach pottery (Walde 1994:84). Pottery with multiple rows of horizontal CWT impressions, S-profiles, decorated angular shoulders, and angled rim profiles, much like those occasionally found in Nipawin Selkirk components, were recovered here, but in greater amounts. Conversely, the presence of Mortlach vessels decorated in Selkirk style, with a single row of punctates and CWT impressed lips, suggests that traits were also being adopted or incorporated from north to south (Malainey 1991:148-159; Meyer 1988:62; Meyer and Epp 1990:334-336).

A summary of attributes, decorative and morphological, identified on the François Punctate and Kisis Angled Rim type vessels in the study area which also occur on Mortlach vessels include:

- angled rim profiles;
- angular shoulder profiles;
- decoration on the rim angle;
-decorative elements which may consist of combinations of punctates and pinches. This is not to suggest that these types of vessel are simply northerly occurrences of Mortlach pottery. On the contrary, the surface treatment and paste qualities are comparable to those of any other Selkirk ware vessel. And, the vessels lack diagnostic Mortlach attributes and attribute states such as check and simple-stamping, dentate decoration, and wedge-shaped rim profiles.

No Mortlach components have been located beyond the southern edge of the forest; rather, the distribution of these ceramics falls off at the northern edge of the parklands (Malainey 1991:369). Selkirk components are restricted to the forest and very infrequently to the very northern limits of the aspen parkland (Meyer and Epp 1990:335). Therefore, there was no or very little overlap of the two territories. It has been proposed that site co-occupation did not occur because the southern forest and northern parkland zone was utilized during different times of the year. Interaction did occur, however, through the medium of long distance trading, visiting, and perhaps intermarriage (Meyer and Epp 1990:336-337). This interaction was significant enough to result in stylistic modifications of the pottery, as demonstrated by Meyer (1981, 1984) for the Pehonan complex. Traits common in Mortlach pottery such as fingernail pinching, angular rims and shoulders, and S-shaped rims, were incorporated into
Selkirk ware, traits which were not present in other Selkirk complexes to the north and east.

It is suspected that the makers of Pehonan and Kisis complex pottery were once part of a common population and would have been subject to a similar scenario of interaction and stylistic modification. While the Kisis complex, at present, appears to be established in the Upper Churchill River Basin, it would not be surprising to find similar ceramics along waterways between the project area and the southern edge of the forest. These might even be associated with plains ceramics and foreign lithic materials suggestive of the above-mentioned scenario of interaction. Unfortunately, there has been very little work conducted which would help establish the extent of Mortlach and Selkirk occupation and interaction in the west-central portion of the province.

There is a natural highway which links the Upper Churchill region to the North Saskatchewan River near Prince Albert, a route which would have facilitated interaction, visiting, and trade. From the North Saskatchewan River this route follows the Sturgeon River north to the Cowan River, along the Beaver River to Lac Ile-á-la Crosse, up the Churchill River to the Kisis Channel. Survey and excavation along this route might, in fact, expand the Kisis complex database and provide evidence of forest-plains interaction.
5.4 Summary

Kisis complex pottery is Selkirk ware influenced by plains groups who produced well-made vessels with a variety of profiles decorated by several elements. It is proposed that the people making Selkirk ware incorporated new stylistic traits into their ceramic repertoire as a result of this influence. Angular shoulders, angled rims, and fingernail pinching on rim angles occur in Mortlach phase pottery but have been incorporated into Kisis complex pottery. However, no direct evidence of contact between the two has been identified to date. Components will have to be identified in the southern edge of the boreal forest containing both forms of pottery to establish this contact.

Narrows assemblage pottery from the Bernadette Chartier and Ice House sites along the Kisis Channel is the only known case of a large collection of plains-like pottery this far north in the boreal forest. Due to the lack of comprehensive analyses and the designation of regional Old Women's phase subunits, it is difficult to precisely or accurately assess the position and affiliation of this sample. However, it does appear that these materials represent a northern regional variant (the Narrows subphase, perhaps?) of this phase. It remains to be seen to what extent, geographically and stylistically, this regional variant is present in the forest.
6.0 Interpretations

6.1 Social Organization Among Historical Groups

Historically, the Western Woods Cree have been documented as composed of several social groups found throughout the Mixed Wood and Northern Coniferous forest of Manitoba and Saskatchewan. Researchers have proposed that these groups were the descendants of the populations making Selkirk ware pottery (see Meyer 1987; Meyer and Russell 1987; Smith 1976; Syms 1977; Wright 1971). This inference is based on the correspondence between the distribution of sites with Selkirk ware and Cree-occupied territories in historical accounts, some ethnographic accounts that women were known to produce pottery in the past, and the presence of historical items found associated with Selkirk pottery. In addition, linguistic evidence suggests that Cree peoples were familiar with ceramics and might have fashioned it themselves (Meyer 1987:189-190). While it is not possible to say, absolutely, that the Cree were making pottery, several lines of evidence support this hypothesis.

Evidence for the existence of several regional Cree bands in Manitoba and Saskatchewan is found in 18th century Hudson's Bay Company records. These regional bands were recognized as stable social units from at least the 1720's
until the smallpox epidemic of 1781-1782, and presumably for a considerable period of time prior to 1720 (Meyer and Russell 1987:26; Russell 1991:215-216). Meyer (1987:196-197) proposes that, based on the idea that if Selkirk composite ceramics were produced by Cree peoples, the Cree may have been in northern Manitoba and Saskatchewan as long as 500 years before the introduction of the fur trade.

These bands were strongly associated with particular territories which "suggests a lengthy time depth for occupation" and "although it is not suggested that these historically known regional bands necessarily have a one-to-one correspondence with the various prehistoric Selkirk complexes, there is a surprising amount of coincidence of geographical locations" (Meyer and Russell 1987:26). It is possible, then, that ceramic differentiation within Selkirk ware might relate to Cree sociopolitical differentiation. That is, the makers of ceramics which have been ascribed to the Kisis complex might be ancestral to the Athabasca Cree from northwest Saskatchewan, the makers of Pehonan complex ceramics with the Pegogamow Cree from the Saskatchewan River region, and the makers of Clearwater Lake complex ceramics with the Missinippi Cree along the Churchill River (Meyer and Russell 1987:26).

The long term stability associated with the development of regional bands might translate into the development of various dialects. Thus, the ceramic assemblages relating to the Churchill River, the
Saskatchewan River, and the headwaters of the Churchill River might reflect not only different regional bands or populations, but distinct dialect groups. There is evidence, though not unequivocal, that the Athabasca Cree were speakers of an "r" dialect which "would indicate that its speakers had been separated for some time from the neighbouring 'th' speakers to the immediate southeast and 'y' speakers to the south" (Russell 1991:161).

If the historically known Cree groups in the Mixedwood sections of the boreal forest were the successors to the makers of Selkirk ware in Manitoba and Saskatchewan, then their linguistic and sociopolitical divisions might reflect earlier (i.e. precontact) population fissioning with a concomitant differentiation in material culture. As Meyer (1984:9) has proposed, these dynamics, relating to division of populations in the formation of new marriage isolates or demes, should be recognizable in the archaeological record. Because demes (by definition) are or were primarily endogamous and their members had a great deal of contact, communication, and interaction within the marriage isolate, dialectical differences would result and, presumably, differences in material culture (Meyer 1984:4).

Wertman (1976) also acknowledges the affiliation of northern Cree regional bands with particular territories, mainly prominent bodies of water or river systems. The bands are primarily endogamous resulting in a high degree of cultural homogeneity. Interaction occurred within
endogamous communities much more frequently than between communities. However, intermarriage occurs roughly 20% of the time outside endogamous communities, in northern Cree groups and in other historically known hunting and gathering groups (Brunson 1985:120; Burch 1978:276; Wertman 1976:42) which "helped improve the quality of life in good times, and helped increase the survival rate in bad" (Burch 1978:273). Such marriages might have been brokered after seasonal communal activities, when some families travelled over 320 km (200 miles) in their resource quest, placing them in contact with other groups (Wertman 1976:24-27, 82). The ties promoted the partnership of hunters which would reduce conflict along mutual borders and offset potentially difficult times (Engelbrecht 1978:145; Hanna 1982a:102-103, 110; Syms 1980:137; Wertman 1976:9, 36). It appears that

When a woman married outside the 'band' and with a person from another 'band', rather than being a loss to the first group she created and symbolized a functioning alliance. Marriages were practiced among individuals who understood the meaning of this practice for their respective groups (Wertman 1976:42).

Burch (1978:262) has found that nineteenth century Northwest Alaskan Eskimo populations organized themselves politically, socially, and economically in autonomous units much like Cree endogamous isolates. The smallest, nearly self-sufficient structure was the local family. These large, bilaterally extended families could involve as many as 50 to 100 people in relatively resource-rich regions.
A society, composed of several local families, was the autonomous unit of traditional Eskimo organization. Marriage was exogamous between local families, but endogamous within societies, with far fewer marriages contracted between societies (Burch 1978:264).

While local families were generally economically self-sufficient (Burch 1979:266, 269), they were not autonomous in their ability to provide suitable marriage partners for their membership. During the course of a single annual cycle of movement virtually all the members of a given society managed to see one another, often as a result of multi-family settlements during seasonal game concentrations (Burch 1978:270). These gatherings promoted information dissemination, socializing, and the selection of marriage partners, strengthening cultural unity (Burch 1978:266).

Thus, there are some generalizations which can be drawn regarding social organization for these small-scale hunting and gathering groups. Populations consist of larger regional marriage isolates which are involved in an endogamous marriage pattern. These, in turn, are made up of smaller local groups consisting of several families of blood kin or affinal relatives. The population shares common subsistence, settlement and cultural activities throughout the majority of the year (Wobst 1974:151-152).

The smaller local or family bands generally range in size from 20 to 70 people, large enough to carry out the
majority of the tasks encountered in the annual pursuit of food and shelter. A minimum of approximately 200 people is required to support an endogamous community, the marriage isolate. Any less than this and the members would have to look elsewhere for suitable marriage partners (Meyer 1984:4). Sometimes several regional bands are required to maintain a viable marriage pool, a case noted by Leacock (1969:12) for the Montagnais-Naskapi. When a membership of approximately 200 people is reached, the constituent family bands can practice exogamy with each other without having to look to other isolates for marriage partners.

The marriage isolate can operate efficiently to a maximum of approximately 800 people. If the isolate grows beyond 800 people the members cannot maintain efficient communication and interaction. Subsisting on a widespread, seasonally varied resource base requires members to operate in large hunting and gathering territories. As the population grows beyond 800 people, family or coresidential groups become increasingly distanced from one another in their food quest. As people become more and more widespread, they miss many opportunities to interact and communicate (Meyer 1984:4). At this point, maintaining cultural continuity in the population is difficult and might require reconfiguration.

The marriage isolate, through means such as seasonal aggregations, provides a forum in which the various family or multifamily coresidential groups can socialize,
interact, and participate in communal economic and ceremonial activities, reinforcing cultural unity. Another important function of the aggregation is to provide members an opportunity to identify suitable mates and broker marriages. Seasonal aggregations would occur during periods when resource densities were great enough to support a large community for an extended period of time (Conkey 1980:610; Wobst 1974:172-173). Gatherings of the marriage isolate arise from conscious purpose, the intent being to bind people together through economic, social, and sacred means (Conkey 1980:610).

6.2 Population Fissioning

As a hunting and gathering population, which subsists on seasonally varied resources, grows beyond several hundred individuals the ability to maintain a high level of interaction decreases (Hanna 1982a:72, 105; Meyer 1984:4; Wobst 1974:154-155). People become so widespread in their food and resource quest as to miss many opportunities to unite which limits the "number of people which can be consistently integrated by the cultural mechanisms of a given cultural system" (Wobst 1974:154). Meyer (1984:4) has suggested that populations who could no longer maintain efficient communication, from time to time, split into groups and took up residence in different, but not too distant areas in order to maintain cultural unity and efficient interaction.
Population increase and social fissioning has been demonstrated by historically known Algonkian groups (Syms 1980:120, 132), such as the Cranes in northern Ontario (Hanna 1982a:200). When a band such as the Cranes, who practiced endogamy, became too large to operate effectively as a unit, it subsequently split. The members then exploited and adapted to new or expanded territories, and developed related but distinct cultural practices. This action served to regain and retain a degree of cultural homogeneity.

Thus, when a marriage isolate has surpassed its ability to stay in frequent contact, its members might find more profit in dividing. This would maximize the amount of production, cultural transmission and homogeneity, participation in important cultural events, and minimize the cost of travel. Increased contact within the breakaway group could, presumably, result in the development of new or modified shared economic and ceremonial pursuits along with stylistic and dialectic distinctiveness (Madden 1983:194; Meyer 1984:1993). However, communication and intermarriage would remain fairly high between groups until the budding group stabilized in terms of numbers of suitable marriage partners (Engelbrecht 1978:151), a scenario Meyer (1984:10) noted for the Pas Mountain Indians.
6.3 Archaeological Implications

Syms (1980:120, 132) points out that, during the Late Woodland period, there are larger numbers of assemblages present with increasing numbers and kinds of diagnostic artifacts, possibly due to population increase and social fissioning. The establishment of new communities, in which the form and effectiveness of socialization and reinforcement can change, often results in a pattern of covariation among formal and/or stylistic traits which reflects spatially, and socially, separated units (Arnold 1978:40; Plog 1977:17; Plog 1980:121).

Ceramics might be an indicator that the people making Selkirk ware in the study region fissioned from a larger population. For instance, certain traits (e.g. decorative or morphological) might be expressed in significantly different frequencies in different regions and, perhaps, the application of the traits might be altered. Endogamy, combined with discontinuity in communication with other groups, population stability and heightened interaction within the community could result in the establishment of a distinctive material culture and stylistic homogeneity throughout the region utilized in the group's activities (Englebrecht 1978:150; Hanna 1982a:71-72, 117; Hantman and Plog 1980:239, 250; Madden 1983:193, 194; Wobst 1974:151-152). Presuming that women were responsible for making ceramics, endogamy would impact the development of pottery styles and the movement of potters.
Ceramic styles unique to such marriage isolates, then, should have a fairly defined distribution due to higher interaction and marriage with members within the isolate rather than with outside groups, with a fairly consistent representation of styles in the isolate's territory. Depending on the site size and function, pottery would occur in variable amounts with various styles present. Variability in the decorative motifs and design execution on pots would increase as more women made pottery. Due to free movement of people in a defined region, the overall ceramic assemblage would, stylistically, be relatively homogenous. Outside of the marriage isolate, however, a sharp drop-off of these distinctive ceramics would be expected to occur. On the other hand, a complete absence of these types outside of the community's territory would be unlikely due to occasional intermarriage with neighbouring marriage isolates.

Given the existence of this kind of band society social organization (especially marriage isolates) among the Western Woods Cree, the following pottery characteristics and distributions would be expected for the Kisis complex in the study region:

1. The recovery of distinct stylistic types, or the identification of elaboration on types already recognized from other Selkirk components.
2. Distribution of these diagnostic ceramics at several sites suggesting that their presence or
development is not related to a specific function at one site (e.g. ceremonial function at one site).

3. Relatively even distribution of distinctive types due to frequent interaction within the social isolate and free movement by potters throughout the territory exploited by the marriage isolate.

4. A defined geographic distribution, with frequent occurrences of the distinctive types of the Kisis complex in sites within the study region. Subsequently, it would be expected that there would be:

i) a minimal presence of the distinctive types or traits in sites representative of other complexes in surrounding regions, and

ii) a minimum of types or traits distinctive of other complexes present in Kisis complex sites.

6.4 Interpretations

The presence of Selkirk ware in this area suggests a relationship between the people inhabiting the region and populations elsewhere in Saskatchewan's boreal forest. At the same time, the presence of a distinctive material culture promotes the idea that regional stylistic differentiation had occurred. The ceramic assemblages,
then, are sufficiently distinctive to suggest that microevolutionary cultural changes have taken place.

A stabilized social system with contact between its members at a greater frequency than with people outside of the marriage isolate would allow for the development of diagnostic types and varieties. If a population was not able to maintain a viable pool of marriage partners, resulting in frequent intermarriage and periodic consolidation with another group or groups, it would not be possible to develop a distinctive ceramic material culture.

Distinctive ceramic materials have been recovered from sites along the Upper Saskatchewan River valley, and assigned to the Pehonan complex (Meyer 1981). The presence of distinctive ceramic styles has been explained as a result of a modification of styles manufactured by northern Algonkians who had begun adapting to the forest-parkland interface in east-central Saskatchewan. By coming into contact with people who occupied the parkland, the potters adopted new traits into the Clearwater Lake ceramic technology they brought with them from the forests to the east (Meyer 1981:34). The group changed in terms of who it interacted and intermarried with, resulting in the development and spread of new ideas and styles. It would not seem improbable that a similar scenario took place in northwestern Saskatchewan, resulting in a modified material culture. The presence of distinctive styles in the study region, in frequencies unknown elsewhere in the province,
is suggestive that their makers had become socially and spatially isolated.

Clearwater Lake Punctate type pottery is the predominant type recovered from the study area making up over half of the Selkirk ware, a common case in Selkirk components throughout the forest. The presence of a high number of Clearwater Lake Punctate type pots, however, does not necessarily connote a Clearwater Lake complex component. As Meyer (1984:45) recognizes,

...the dominance of Clearwater Lake Punctate pottery does not automatically make...a Clearwater Lake assemblage. In large part the various complexes of the Selkirk composite share the same pottery types although each usually has its distinctive types as well. The shared types usually occur in differing frequencies from one complex to the next.

The presence of Clearwater Lake Punctate, Alexander Fabric Impressed, and François Punctate types is not to be unexpected for the Kisis complex. Their frequencies, however, are different compared to other complexes. In addition, the presence of a distinctive type, the Kisis Angled Rim type, is notable. Composing approximately one-quarter of the Selkirk ware analysed from the study area, the Kisis Angled Rim type is an integral part of the complex and represents a significant shift in stylistic development.

This vessel type has been identified at several sites in the study area and evidently was not developed for use within one site for one purpose (e.g. ceremonial, etc.).
The relatively large number of vessels of this type and their distribution within the study area is evidence that, once developed, the style was readily shared and learned by several potters who stayed within a relatively defined region. This has lead to a relatively even distribution of the type in the region.

The small sample size of this collection might have possibly biased the representation of decorative motifs. It will be necessary to continue research in the area to determine if these elements and their frequencies are as popular as suggested in this sample. The pots are not all so similar, however, as to suggest they were made by the same person. On the contrary, there is enough variability in the application and execution of design elements, in vessel sizes, and in vessel zone sizes to support the idea that several potters were making this vessel type.

While there is no set standard to determine the work of individuals in ceramics, at least one criterion suggests that several were making the Kisis Angled Rim type. This is the size and morphology of fingernail pinch gouges. The shape and size of the gouges suggest that women with different sized fingernails were making these pots. Additionally, differences in the application of the pinches (i.e. orientation, etc.) suggests differences in motor coordination, and thus the work of more than one individual. This identification was not tested on a large sample but it might have some merit, particularly in light of James
Hill's (1977) work on recognizing individual variability based on the execution of design elements. Finger-print analysis on bosses from vessels of this type might support or refute this claim. Ultimately, it appears that several potters were making this type, sharing information on its production, and adding their own decorative touches.

If the Kisis Angled Rim type was a fringe element or in the initial stages of being developed, it would not be expected to be found commonly in sites and throughout a region. Kisis Angled Rim type pots are found in both large sites like the Ice House site as well as from small collections, such as from the Sandy Point site. It is a commonly recovered type, well developed and distributed, and not a type in the initial stages of being developed.

The Kisis Angled Rim type is found infrequently outside of the Upper Churchill River Basin, even in intensively surveyed areas producing large amounts of Selkirk pottery. This vessel type has been found in three other regions in Saskatchewan: Montreal Lake (site GcNj-2), La Ronge (the Sanderson Street site GgNh-1) the Sanderson Street site (GgNh-1) at La Ronge, and Nipawin (the Bees, FhNb-7, and Mollberg, FhNa-1, sites). Several of the pots share rim angle decoration and lip decoration elements similar to those from the study region. Lip decoration consists of CWT impressions on four pots, while lip decoration is absent on the Sanderson Street site pot. The rim angle decoration consists of pinches on one Mollberg
site pot, pinches alternating with punctates on the Bees site and site GcNj-2 pots, and pinches over punctates on the Sanderson Street site pot. Oddly enough, the second Mollberg site angled rim pot lacks rim angle decoration altogether.

There is some question as to the affiliation of two of these angled rim pots - the pot lacking rim angle decoration from the Mollberg site and the angled rim vessel from site GcNj-2. The lack of rim angle decoration combined with wall thickness and paste qualities suggest that one of the two Mollberg site angled rim pots may be a Mortlach vessel. The vessel from GcNj-2 has a higher degree of lip and rim burnishing than any of the Kisis Angled Rim pots and has very compact paste, traits frequently identified on Mortlach pots.

Mortlach pottery occurs in Pehonian components along the Saskatchewan River, possibly as a result of visiting and intermarriage, and Mortlach pottery exhibits angled rims. This may account for the angled rim vessel lacking rim angle decoration from the Mollberg site, a site known to produce other Mortlach pots. The possible Mortlach angled rim pot from site GcNj-2 might have arrived at Montreal Lake through a similar means of interaction (Meyer 1984:43; Meyer 1995 personal communication). While two of the angled rim pots in these regions are probably Mortlach in origin, the makers of Kisis complex pottery did marry, infrequently, into other groups as suggested by the
recovery of three Kisis Angled Rim type pots outside the study region.

It appears that Kisis potters only married into groups making Selkirk ware between the Churchill and Saskatchewan Rivers. No Kisis Angled Rim vessels have been found, to date, associated with the artifact assemblages of other, contemporaneous groups (e.g. Mortlach phase, OWP, Taltheilei tradition) suggesting that no or few marriages were brokered with groups who did not make Selkirk ware.

The presence of a small number of François Punctate type pots supports the proposition that few vessels of types distinctive of other groups would occur in Kisis complex ceramic assemblages. This type is distinctive of the Pehonan complex. This type was elaborated in the Kisis complex, however. Grit was applied to still-damp vessel walls as, presumably, decoration and the pots were constructed with very angular shoulders.

The application of grit might be recognized as a distinctive trait in the Kisis complex. At present, this elaboration occurs infrequently, on two François Punctate type pots and on one possible Clearwater Lake Punctate type pot. As such, it cannot be confidently identified as a diagnostic feature of the complex, though it is unique. This trait is found on pottery at two sites in the study area, Ice House and McCusker Lake. It also occurs on a vessel from an underwater site at the bottom of Anglin Lake which is outside the study area.
The Anglin Lake and McCusker Lake pots are almost twin François Punctate type vessels based on the decoration, size and shape. As Smith (1984:26, 32-33) has argued, it is highly likely they were produced by the same potter. While the grit decoration on the François Punctate type pots is distinctive, Wilson (1982:67) also notes that the Anglin Lake pot, and thus the McCusker Lake site pot, differs from "known François Punctate vessels in that it is very large and the rim is sharply excurvate". Additionally, the shoulder has an angularity of 105°, whereas Pehonan François Punctate type pots have less angular shoulders. The undecorated angular shoulder sherds from the Ice House site have a range of angles between 118° and 138°, more similar to the Pehonan examples of this type.

The geographically widespread, though sporadic, distribution of the grit decoration is interesting. The occurrence of this trait at the Ice House and McCusker Lake sites is not entirely surprising considering that many of the pots from these sites are of the same types and share similar traits, and that the sites are relatively close. However, a straight-line distance from Anglin Lake to McCusker Lake is approximately 250 km, a distance which does not take into account the length of a water route between the two. It is difficult to understand the distribution of these pots, particularly since the Anglin Lake pot was found at the bottom of the lake.
The François Punctate pot at Anglin Lake might be the result of out-marriage from the Upper Churchill River Basin. This assumes the trait is diagnostic of the Kisis complex and was developed by these potters. Conversely, it could be suggested that the pottery from the McCusker Lake and the Ice House sites arrived through the in-marriage of women from central Saskatchewan. The style, then, would have been developed in that region in order to spread. Another possibility is that its distribution simply reflects the territory which the makers of Kisis complex pottery utilized. At present, there is simply too little data on hand to elucidate the vehicle of this trait's distribution and frequency.

6.5 Discussion

The development of the Kisis Angled Rim type of pot, and traits such as, perhaps, grit applied to the still-damp exteriors of pots, supports the idea that the people in the study area had separated from another population with which they shared the same ceramic technology. Hanna (1982:106) has stated that "as the frequency of interaction [between units] decreases, so does the opportunity for sharing behavioural patterns". The spatially separated unit, in this case the makers of Selkirk ware in the Upper Churchill River Basin, was able to sustain itself in relative social isolation long enough to develop a distinctive material sub-culture. Here, women produced pottery which exhibits
covariation of traits rarely identified elsewhere, yet which are common in the study region. If stylistic development and homogeneity are indicators of frequency of interaction, then the people who inhabited this study region were in frequent contact and communication, while interacting infrequently with other groups.

The variation in the execution of design elements and vessel zone construction on the Kisis Angled Rim type suggests that several women were making this type of pottery. If the Kisis Angled Rim type of vessel was developed for a specific, single site function its distribution would be restricted to one site. Rather, it has a homogenous distribution throughout the study area. It appears that, as women trained their daughters and granddaughters to make this style, they shared ideas relating to form and decoration. As these women married, moved between family or coresidential units, and travelled in their annual cycles they manufactured and deposited their wares at several sites throughout the study area.

Spatial isolation cannot fully account for the distribution of this suite of pottery types and attributes. The restricted distribution of this type is also influenced by, and reflective of, social isolation. While spatial isolation can result in the development of new or elaborated material culture, social isolation is equally, if not more, important in the distribution of that material culture.
Endogamy establishes the boundary of an individual's marriage universe. In this case endogamy operated at the level of the marriage isolate, which is composed of several family or coresidential units belonging to one, possibly several regional bands which maintained frequent interaction and communication. Within this universe, exogamy could be practiced on several levels (Hanna 1982a:111), such as between family or coresidential groups where few or no suitable marriage partners were available for a given person. At times, exogamy would be practiced between various regional bands if more than one regional band was involved in the marriage universe. The marriage isolate is capable of providing suitable marriage partners for all its members, thus few marriages would be brokered beyond its active community. People who consistently marry and maintain residence within a community that shares common social, economic, and ceremonial pursuits would be expected to deposit their artifacts more often in the region utilized by that group. Ultimately, this would result in a distribution pattern where styles would be geographically defined.

Conversely, the greater the number of groups with which any one group maintains marriage relations the greater the territory over which behavioural patterns have the potential to be shared (Hanna 1982a:117). Styles would have a widespread distribution if a community regularly intermarried with groups it did not frequently share
social, economic, and ceremonial pursuits with. Therefore, if exogamy was commonly practiced outside the study region community, with women moving between communities, the Kisis Angled Rim type would have a wide distribution, occurring frequently in the components of other groups.

The ceramic assemblages studied here do not appear to indicate such intermarriage. At present, based on the restricted distribution of the Kisis Angled Rim type it appears that women married within a relatively enclosed social universe, centred in the Upper Churchill River basin. If women did move, it more customarily occurred between coresidential or family units, and rarely beyond the marriage isolate. While face to face contact undoubtedly occurred with other groups of people, endogamy at the level of the marriage isolate limited the spread of women making Kisis pottery into these groups. Endogamy, then, established boundaries in space resulting in regionally distinctive clusters of material culture.

Kisis Angled Rim type pots occur infrequently outside the study region and they have not been found in other coeval non-Selkirk components. For instance, the regions north of the Churchill River were occupied by the makers of Taltheilei tradition material culture (Meyer et al. 1981:93). Excavations and surveys conducted to the north of the study region, along Highway 155 southeast of La Loche (Hanna 1982b), along the Key Lake Road right-of-way following the Haultain River (Meyer et al. 1981), and along
the Cluff Lake Road right-of-way between La Loche and Cluff Lake (Wilson 1979) have failed to produce Selkirk ware ceramics, suggesting that there was no intermarriage between the two cultural groups.

6.6 Interaction with the Makers of the Narrows Assemblage

The presence of plains pottery from sites in the study area which also produced Kisis ceramics complicates the proposed model of social interaction and intermarriage. This is further compounded by the presence of a large number of vessels of this ware apparently in the same stratigraphic levels (according to preliminary reports) at the Ice House site.

At present, there is only one documented site, the Bernadette Chartier site, which provides information regarding the relative age and position of the ceramic industries along the Kisis Channel. The Narrows assemblage has a stratigraphic position above a Middle Taltheilei component and below a Kisis complex component. This would tentatively give it an age falling between approximately 630 to 900 B.P and A.D. 1300 or 1400. While ceramics from the Narrows assemblage component occur in the Kisis component, their presence has been interpreted as a product of vertical displacement. Millar and Ross (1982:49) report that there are separated components at the Ice House site but their archaeological affiliation is unknown.
It is proposed that Narrows assemblage pottery in the study region is not a product of marriages with the makers of Kisis complex pottery. Currently, there are not enough data to establish that the two wares occur together in archaeological assemblages. Instead, the Narrows pottery is interpreted as occurring earlier in the region than the Kisis pottery. Additionally, the lack of Kisis ceramics in OWP assemblages outside the study area appears to support this proposition.

The pottery of the Narrows assemblage has not undergone the same battery of questioning regarding distribution and marriage patterns as did the Selkirk pottery from the study area. This is primarily because no other collections of this character have been identified this far north. The Narrows assemblage pottery is the first known case of a large plains-related pottery collection in the boreal forest of Saskatchewan. While other OWP pots have turned up in the north, they have been individual recoveries. This, combined with the lack of archaeological investigation to the south of the Kisis Channel prohibits understanding the distribution and amount of this pottery north of the parklands. There simply is not enough geographic and stylistic information regarding the OWP or Narrows assemblage pottery in the boreal forest and its associated non-ceramic material culture to attempt to account for the means by which it arrived in the study area.
6.7 Summary

Co-occurring stylistic and morphological traits are used to define types, and each of the Selkirk composite regional complexes are defined based on differing frequencies of diagnostic ceramic types. The ceramics from northwestern Saskatchewan display combinations of traits which support the contention that they are, indeed, distinctive of a regional complex. The identification and classification of the Kisis Angled Rim type, which occurs infrequently outside of the study area yet makes up approximately one-quarter of the Selkirk ware within the study area, has been of primary importance in recognizing the Kisis complex.

The Kisis Angled Rim style of pottery meets the criteria outlined by Clarke (1968), as well as by Sabloff and Smith (1969) for a type with varieties. That is, the type is represented by a relatively "homogenous population of artifacts which share a consistently recurrent range of attributes within a given polythetic set" (Clarke 1968:191). The consistent range of traits which covary are an angled rim morphology and decoration on the rim angle. The form and amount of decoration along the rim angle can vary from vessel to vessel which suggests that type-varieties or sub-types are present. There are four sub-sets of the artifact-type's polythetic set of attributes present: fingernail pinches, punctates, fingernail pinches over punctates, and fingernail pinches alternating with
punctates. Future research will more accurately determine the frequency of these type-varieties.

While François Punctate type pots are not as elaborately decorated, or as diagnostic of this complex, as previously suggested they do demonstrate some distinctive features. The application of grit to still-damp vessel surfaces is almost unique to the study region, but its occurrence is infrequent and might reflect the idiosyncratic work of one potter. The morphology of these François Punctate type pots is also distinctive. The size, degree of upper neck excurvature, and the remarkable sharpness of the shoulder angle stand out compared to other pots of this type from elsewhere in the province. While these distinctions do not require that the vessels be re-typed, they do introduce minor but significant variations on decorative technique and vessel form, suggestive of a type variety (Sabloff and Smith 1969:278-279).

The development of distinctive ceramic technologies are herein conceived of as reflective of considerable periods of spatial and social isolation. The data support the expected archaeological patterning for a marriage system based on that observed among the Western Woods Cree. In this system, exogamy occurred between family or coresidential units but infrequently beyond the community (i.e. the marriage isolate) which shared common economic, ceremonial, and social pursuits. This community was made up of approximately 200 to 800 members who remained in
frequent contact, ensuring cultural continuity. Each member of the marriage isolate was able to find a suitable marriage partner within the community, reducing the need for potters to leave the community. This resulted in a homogenized distribution of cultural patterns in a defined region of northwestern Saskatchewan.
7.0 Conclusions and Summary

7.1 Introduction

This thesis presents the first systematic study of pottery from the Mixedwood Section of the boreal forest of northwestern Saskatchewan. It includes all the pottery recovered in the study region up to 1991, with the majority of the sample collected from sites along the Kisis Channel. While a comprehensive study, it represents only the first step in understanding the inhabitants of northwestern Saskatchewan during the Late Woodland period.

This analysis resulted in a revised definition of the Kisis complex of the Selkirk composite and a model to account for its development and distribution. By critically scrutinizing the materials and reconstructing portions of vessels it was possible to recognize previously unidentified traits. In addition, an attempt was made to describe and clarify the nature of the plains-like pottery, that of the Narrows assemblage, from the Kisis Channel.

7.2 Kisis Complex Pottery of the Selkirk Composite

While it was originally felt that the pottery of the Kisis complex was simply a western expression of the Clearwater Lake "phase", type and trait frequencies suggest it is a recognizable complex. This is a product, largely,
of the examination and reconstruction of ceramics from the Ice House and McCusker Lake sites.

The Kisis complex, then, is identified primarily on the basis of the Kisis Angled Rim type. The rim angle is decorated on every pot by fingernail pinches, the predominant element, and/or punctates to a lesser degree. Lip decoration is common, consisting most commonly of CWT impressions on the lip corners. No large-scale reconstructions of this type have been possible. The pots, however, are generally quite large, well-made with tightly constricted necks and prominent, rounded shoulders, and tempered with moderate amounts of large-sized (i.e. over 1 mm in diameter) grit.

François Punctate type pots comprise only a minor portion of the Kisis complex ceramic assemblage, and lack shoulder decoration. The shoulder angles of the two pots of this type from the Ice House site range from 118 to 138°. The small sample and a lack of reconstructions has hampered an understanding of the decorative and morphological variation for this type at the Ice House site. Grit decoration and highly angular (~105°) shoulders identified on two very widely distributed pots, from the McCusker Lake and Jacobsen Bay sites, of this type might be distinctive of this complex. At present it appears the pots were made by the same artisan, thus a larger sample is necessary to determine the extent and popularity of these traits in the community's ceramic repertoire.
Much like Selkirk components elsewhere there is a large percentage of Clearwater Lake Punctate type vessels in the study region collections. These vessels exhibit a minimum of lip decoration (made up most commonly of CWT impressions), short excuvate or vertical upper necks, and gentle to prominent rounded shoulders. The lip diameters, range from less than 10 cm to over 25 cm.

While the ceramics diagnostic of the Kisis complex are relatively well known, the remaining cultural industries are not. The only Kisis materials recovered from documented contexts are from the Martin and Bernadette Chartier sites. In these components no complete projectile points were recovered. Small side-notched points were found at the Ice House site and other Kisis Channel sites which produced Selkirk ware and are similar to points recovered in Selkirk components elsewhere, but due to compressed stratigraphy and component mixing their association and affiliation is unknown (Millar and Ross 1982:51; Rollans 1992). To date, strong association between points and pottery has yet to be been demonstrated.

While bone tools were uncovered in excavations of Kisis components at the Bernadette and Martin Chartier sites (Millar 1983:197-200), none were found in the 1991 excavations at the Ice House site (Rollans 1992:37). Tools from the former sites include pointed bone slivers, a wedge, and a grooved bone (Millar 1983:197, 200). The joined component from the Bernadette Chartier site, which
Millar (1983:72) felt was most closely affiliated with the Kisis complex, produced a side beamer or smoother and a squared sliver (Millar 1983:197, 199).

The features identified at the Martin Chartier, Bernadette Chartier and Ice House sites are similar. To date, they include small pits of unknown function, ash lenses and hearths (Millar 1983; Rollans 1992). One intriguing feature was also noted. It is composed of stone slabs laid side by side and associated with lithics, ceramics and faunal items near hearths. This feature type has been interpreted as analogous to a kitchen counter work area (Millar 1983; Scanlon n.d-e). A linear trench affiliated with the Kisis complex component from the Martin Chartier site was noted, but no function has been proposed for it (Millar 1983:48).

The geographic extent of the Kisis complex is not well known, due to the lack of research in northwestern Saskatchewan. However, based on the distribution of the Kisis Angled Rim type, the complex appears to be focussed in the region encompassing Lac Ile-à-la Crosse and Churchill and Peter Pond Lakes. The presence of a varied ceramic collection from McCusker Lake suggests that Kisis potters were moving along and utilizing the rivers and streams feeding the three above mentioned lakes. Thus, sites producing Kisis complex ceramics should occur along the Dillon, McCusker, Kazan, and Canoe Rivers and the lakes.
they feed and drain in their path to Lac Ile-á-la Crosse and Churchill and Peter Pond Lakes.

7.3 Origins of Decorative and Morphological Variation

At approximately the same time that the people who made Selkirk pottery were in Saskatchewan's boreal forest, the people making Mortlach pottery were widespread on the Saskatchewan grasslands and routinely crafted vessels with angled rim and shoulder profiles. Mortlach cultural remains are found into the northern parklands and, in east-central Saskatchewan, in occasional association with Pehonan complex ceramics. The variation that distinguishes Pehonan ceramics from other Selkirk ware has been proposed to have resulted from interaction with and influence from Mortlach peoples.

Kisis pottery also displays similar variation, though components which contain both Kisis and Mortlach materials have yet to be identified. The similarity which exists between Kisis and Pehonan ceramics might be a result of a similar circumstance of interaction and influence with groups making Mortlach pottery. The testing of this proposal is contingent upon research in the southern boreal forest and northern parkland zone of central and west-central Saskatchewan, and along the Sturgeon, Cowan, and Beaver Rivers, a natural highway which connects the Saskatchewan River to the study region. It appears that
the makers of Kisis complex ceramics interacted most commonly with Pehonan groups based on the recovery, albeit infrequent, of Kisis Angled Rim type vessels in Pehonan components. If these two groups were, at one time, involved in a similar sphere of influence it would not be unexpected that they would share similar ceramic traits and would interact more often in comparison with other Selkirk or other pottery making groups.

7.4 Social Patterns: Bridging the Gap Between Artifacts and Artisans

This description and classification of the pottery of the Buffalo Narrows region has been oriented to establishing a bridge between the known distribution of the artifacts and the social or behavioural causes for that distribution. The ancestors of the historically documented Western Woods Cree have generally been considered to be the makers of Selkirk ware. The historically known social systems in which the Cree peoples were involved should, then, approximate those of the makers of Selkirk ware and be reflected, to some degree, in the archaeological record. The data produced from this research support the proposal that the development of stylistically distinct Kisis ceramics and the regional distribution of the potters making these ceramics was regulated by a social mechanism such as a marriage isolate.
The archaeological expectations of the model of an endogamous marriage pattern were met to certain degrees. The expectation that previously recognized types might be elaborated upon was met by the recovery of François Punctate type pots with markedly angular shoulders and grit applied to the exterior surface. The expectation that distinct stylistic types would be manufactured was fulfilled by the identification of the Kisis Angled Rim type. The distribution of the Kisis Angled Rim type is not restricted to just one site as it might be if it was designed for a single purpose at a single site, such as for a ceremonial function. Rather, this type has been commonly recovered from both heavily and lightly sampled sites in the region. Some of the vessels display cooking residue and what might be ochre staining. This might indicate the vessels fulfilled a variety of functions at several sites. While the size of the ceramic sample was small, the homogenous distribution of this type suggests that it was well developed and shared throughout the territory utilized by the various family groups involved in the marriage isolate. However, increasing the database from the study area is necessary to support this claim.

The expectation that pottery produced in a socially isolated environment would have a sharp drop-off rate outside the study region was also met. Few vessels of the Kisis Angled Rim type were recovered beyond the study area, even in regions which had undergone intensive
investigation. Downstream from the study area, no vessels of this type have been recovered along the Churchill River. The only outside occurrences of this type are from Selkirk components at the Sanderson Street site at La Ronge and the Bees and Mollberg sites along the Saskatchewan River. While it has been proposed that the makers of Kisis Angled Rim type pottery incorporated decorative and morphological attributes into their pottery as a result of interaction with Mortlach phase potters, the type has not been recognized in the components of other contemporaneous cultural entities. When intermarriage was practiced, it appears it was only with other Selkirk pottery making groups.

The lack of pottery diagnostic of other groups in Kisis assemblages also supports the premise that Kisis groups were exogamous only within the marriage isolate, not beyond it. Social boundaries curtailed the movement of women in and out of the isolate. For instance, while the François Punctate type of pottery is routinely found in Nipawin-area sites, it is uncommon in the study area sites. Spatial isolation alone could not account for this fall-off. Cree family groups have been documented to have routinely travelled over 320 kilometres (200 miles) after their seasonal aggregations (Wertman 1976:82). This would provide an opportunity for relatively far-flung groups to meet and interact; if a social isolator was not in place, such as a marriage isolate, pottery indicative of other
groups would have become incorporated into Kisis components.

7.5 The Narrows Assemblage

The presence of a northerly regional expression of OWP pottery has not been recognized previously in the province. This recovery is puzzling and will require a reconsideration of the Late Precontact period culture history of northwestern Saskatchewan. This pottery was recovered in association with small side-notched projectile points, and features consisting of small hearths set against the east sides of large boulders (Millar 1983:76-85).

Narrows assemblage pottery, unlike other recoveries of OWP pottery in the forest of Saskatchewan and Alberta, is present in large amounts at the Ice House site and in smaller collections from other sites along the Kisis Channel. While vessels were largely incomplete they appear to be fairly uniform in terms of surface finish, decoration, workmanship, paste composition and, possibly, profile.

While comparing most closely to OWP pottery from Saskatchewan, these vessels exhibit distinguishing traits or trait frequencies such as a total absence of lip decoration and a universal presence of upper-neck punctate decoration. Angular shoulders are not present in the sample. Sandy paste, or the presence of sand as a
tempering agent, is also distinctive. And, while the vessel wall thicknesses are variable they do not approach the gross thickness of OWP pots from the plains. Rather, the walls are relatively thin.

There is little indication that interaction occurred between Kisis and Narrows potters. It is possible that the people who made OWP pottery were in northwestern Saskatchewan after 1275 +/- 75 years B.P. but before the area was occupied by Kisis peoples, possibly as early as 500 years ago.

The occasional presence of OWP pottery in northeastern Alberta, with dates as late as 430 +/- 20% years B.P. at Lac La Biche (Learn 1983:59), suggests that its makers were familiar with the north, or at least the inhabitants of the north. It is possible, then, that the OWP had a greater time depth in west-central and possibly northwestern Saskatchewan than previously recognized. It would not be unexpected, then, that a distinct expression of OWP pottery developed in this region. Why there is such a large concentration of this material in the Kisis Channel area is not known, considering the success of OWP groups as plains bison hunters.

7.6 Research Difficulties and Future Considerations

While Kisis Angled Rim type pottery occurs frequently in the study area, comprising up to one-quarter of Selkirk ware assemblages, the overall ceramic sample is small. In
total, less than 100 pots representing two wares were available for this study. In addition, some sites from which the Kisis Angled Rim type pots were recovered either lack documentation or were surface collected. Conversely, the two pottery-producing sites for which there are records produced only three Selkirk ware vessels, all of the Clearwater Lake Punctate type.

Sample size, recovery method, and the lack of contextual information is obviously a problem and has impaired a more complete understanding of the peoples who inhabited this region in the past. While this research has clarified the nature and variability of Selkirk ware in northwestern Saskatchewan and this author has proposed a model to account for its distribution, a considerable amount of research will be required to gain a more comprehensive understanding of the Kisis complex. This work should be focussed along the lakes and rivers which feed Lac Ile-à-la Crosse and Churchill and Peter Pond Lakes, as well as along the Beaver, Cowan, and Sturgeon Rivers. Additionally, dates must be produced to determine the time frame in which the makers of Kisis pottery were in the area.

To more adequately understand the nature of Narrows assemblage (or 'Narrows subphase') pottery, work must be conducted to the south of the study region. This might help to account for why such a large, very plains-like pottery assemblage is present so far north in the boreal
forest. While it appears that the OWP pottery was deposited after a Middle Taltheilei occupation of the Kisis Channel region but before a Kisis complex occupation, dating of the pottery should be undertaken to determine if this proposition is true.

Notwithstanding the fact that this research has been hampered by provenience difficulties, it has demonstrated the utility of examining previously recovered cultural materials. Useful information is often available from already collected materials. It is not always necessary to look for 'new' data by excavating the finite number of sites remaining.

7.7 Summary

The Selkirk ware pottery from the study area is regionally distinct. The general distribution of this pottery closely approximates that of Woods Cree in northwestern Saskatchewan, and the presence of historic items in these sites suggests the makers of Selkirk ware were in the area until the time of European contact. It is suggested that the Cree people who were recognized in the project area at the time of contact, then, were the descendants of the groups who made Kisis complex pottery.

The concentration and even distribution of the Kisis Angled Rim type in the study region and its infrequent occurrence outside it supports the premise that the potters were practising endogamy in a defined social universe, the
marriage isolate. Further, the type's absence in non-Selkirk components suggests that what intermarriage was being practiced was with other groups making Selkirk ware. This is comparable to the social organization of the historic Western Woods Cree, where small family and multi-family groups formed regional marriage isolates. The members frequently met and interacted, sharing ideas and taking part in co-operative activities. The Kisis Angled Rim type, then, is viewed as an indicator of regional variation and, as a physical expression of human behaviour, symbolic of spatial and social isolation.

The second ware identified in this thesis appears to be a northern expression of the OWP. While OWP pottery is regularly identified in the parklands, it is a rare occurrence in north-central and north-eastern Saskatchewan. Until more research is conducted in west-central and northwestern Saskatchewan it would be premature to formulate a model to account for the means by which it arrived in the study area. All that can be suggested is that, possibly through interaction with Selkirk potters elsewhere (as suggested by the very common occurrence of punctate decoration), a regional expression of OWP developed in Saskatchewan. This expression, which is herein tentatively labelled the Narrows subphase of the Old Women's Phase, is found in the parklands and, intermittently, over a large area of the boreal forest.
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