FORMAL VARIATION IN DORSET ART:
A COMPUTER STUDY OF ARCHAEOLOGICAL DATA

by

Ric Windmiller

A Thesis Submitted to the Faculty of the
DEPARTMENT OF ANTHROPOLOGY
In Partial Fulfillment of the Requirements
For the Degree of
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PREFACE

A long-neglected aspect of prehistoric Dorset culture has been the attempt to correlate aspects of its art with other cultural features using statistical methods to indicate fruitful areas for future study. As the use of statistical methods can only point to possible interrelationships between particular aspects of societies, the relative importance of statistical relationships must in the final analysis be judged on the basis of knowledge about societies--either present, historic, or prehistoric. In the case of the Dorset culture and its art work, the ideas and finds of previous researchers in the Canadian central and eastern arctic form the foundation upon which any statistical study must rest. It is to those who have carried out both ethnographic and archaeological work in these areas that I owe a great debt.

The research for this thesis was carried out mainly between 1968 and 1970 while I was in residence at the University of Manitoba. It was during this time that parts of the first, second, and third chapters were written, based on observations of Dorset artifacts housed in two different institutions. It was also during this time that much of the basic thought about statistical applications and corresponding computer programs took place. Finding suitable computer programs, running these programs, and writing the remaining chapters took place between 1970 and 1973. Final revisions were made during the first half of 1974. The work between 1970 and 1974 was often slowed or delayed as my research duties at the Arizona State Museum, University of Arizona, became pressing.

Several individuals from the University of Manitoba have contributed directly to the success of the present project. To George Swinton, Professor of Art, I owe much gratitude for allowing me to work with an idea that he had fostered for some time: the use of statistical methods translated into computer programs that would crosstabulate attributes of Dorset art. I have not concentrated entirely on this particular aspect of Dorset art, but have included an emphasis on incorporating archaeological problems. Yet, I have received continued financial support throughout the analytic stages of the project and much stimulating discussion.

To fit the statistical analysis into a relevant framework, some struggle with theory was necessary. Ernest S. Burch, Jr., Associate Professor of Anthropology, introduced me to many aspects of theory and its importance in carrying out scientific work of any kind.

Through the guidance of my advisor, C. Thomas Shay, Associate Professor of Anthropology, I was introduced to statistical procedures used in archaeological analyses during an early part of the study. Shay's interest and enthusiasm have helped to keep the problem alive during difficult stages of the analysis.

Several individuals have made available artifact collections as well as facilities during the course of the present study. First, I would like to extend my gratitude to William E. Taylor, Jr., Director of the National Museum of Man, Ottawa, who kindly furnished working space and made available museum collections. Also, to Jørgen Meldgaard of the Danish National Museum in Copenhagen and visiting scholar to the Canadian National Museum during 1969, must go my appreciation for allowing me to use material from the Iglulik area that he was studying at the time. Brother Volante of Churchill, Manitoba, kindly allowed me to study and photograph Dorset artifacts housed in the Oblate Brothers Eskimo Museum.

I am very much indebted to many individuals with whom I was able to discuss the application of statistical techniques to archaeological problems. In particular, G. F. Atkinson, Department of Statistics, University of Manitoba, spent many hours reviewing with me statistical methods that would be applicable to the present study. Others, including Keith Dixon, California State University at Long Beach, George R. Mead, Washington State University, and Richard Pollnac, University of Missouri, helped to clarify my conception of computer applications to studies

of prehistory. For the practical application of computer programs to a body of data, I am indebted to Barry Wiebe, University of Manitoba, Larry Manire, David Taylor, and Carol Margolis, University of Arizona.

The mechanics of assembling this paper were made easier by assistance from three individuals. Charles Sternberg prepared the maps that are placed in the text. Barbara Jablonski typed draft copies of the manuscript. I am also indebted to Fran Snow for typing the final copy of this thesis.

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ABSTRACT

Several questions about the nature of prehistoric Dorset art have been reviewed over the years without any success at their solution. These questions include the ideas that Dorset art style appears to be relatively homogeneous with regard to design elements throughout the eastern arctic, that temporal changes in Dorset art at least within the Iglulik district of the northwest Foxe Basin area form a trend from realistic to abstract in the depiction of animate forms, and that small carvings were made and used largely by shamans. These ideas are taken from their original contexts and formulated into hypotheses that are tested on the basis of 250 Dorset artifacts from sites and localities scattered throughout the Canadian Arctic. Statistical methods used in the tests are measures of association performed on contingency tables. Although the sample is limited, the tests show that sites in the Iglulik district may form a region where certain stylistic elements are unique, that changes through time in the Iglulik district are not necessarily from realistic to abstract depiction of animate forms but that there is some covariation of the two types through time, and that Dorset art is probably not predominantly shaman's art. On the basis of the present study, additional questions about regional stylistic variation, change, and function of art work within the prehistoric societies are raised that, if incorporated into the research design of future excavations, may lead to a clearer indication of the place of art work in Dorset culture.

CHAPTER I

INTRODUCTION

For many years there has been speculation of the cultural significance, stylistic variation, and affinities of prehistoric Dorset Eskimo art. The concern for Dorset art has been in regard to the archaeological problems of reconstructing the culture sphere in which small carvings of bone, wood, ivory, shell, antler, and steatite formed a functional part, the delineation of stylistic patterns that reflected temporal and spatial variation, and stylistic elements that would illuminate the ancestry of Dorset culture as a whole. In past research into the nature of Dorset art, the basic assumptions appear to have been that patterns of style variation and change and properties analogous to those found in ethnographic material were symbolic of the ways in which the prehistoric groups of people were organized. Dorset art can form a partial basis for reconstructing certain aspects of prehistoric Eskimo life, if it is combined with independent archaeological evidence (e.g. particular cultural features with art representations associated with it).

It is the aim of this thesis to apply statistical methods appropriate to the description and analysis of Dorset art that will assist in meeting some of the above goals in defining its relevance to Dorset culture. However, before examining statistical programs, their applications to Dorset art, and a summary of the sample used for this study, it is necessary to outline present concepts of Dorset culture. Following this brief resume, previous approaches to the analysis of Dorset art and the ways in which studies of Eskimo art in general have influenced archaeological interpretations will be reviewed for the purpose of placing the present analysis in proper perspective.

I. THE DORSET CULTURE

In 1925, Diamond Jenness first described the Cape Dorset culture, a prehistoric culture antedating the Thule Eskimo subtradition of the Canadian Arctic and characterized by closed-socket harpoon heads, triangular end-blades, the apparent lack of the bow drill, and distinctive ivory art in miniature. The material on which Jenness' preliminary description was based had been sent to the National Museum of Canada by Captain L. T. Burwash, who had obtained the specimens from Coats Island and Cape Dorset. Through careful study, Jenness recognized artifact types distinct from those Therkel Mathiassen (1924, 1927) had classed as Thule and, on the basis of patination and lack of the drill for making perforations in bone and ivory, Jenness suggested that affinities of the material were to a culture pre-dating Thule. The culture outlined by Jenness has since become known simply as the "Dorset culture" and has been shown to span most of the eastern arctic, from King William Island in the west, to the east and north as far as the northeastern part of Greenland, and to Newfoundland in the south (Taylor 1968: 1). Recent work has extended the geographic distribution of Dorset finds to the vicinity of Churchill, Manitoba, on the west coast of Hudson Bay (Nash 1969: 154) and to Bernard Harbour near the Coronation Gulf area (Taylor 1965) (Figure 1).

The temporal depth of Dorset is generally thought to extend from a time when it diverged from an earlier culture with affinities to the Arctic Small-Tool tradition of the western arctic at about 800 B.C., to about A.D. 1300 when the remaining enclaves of Dorset people became extinct or were absorbed by the Thule subtradition (cf., Taylor 1968: 1; Meldgaard 1962; and Collins 1964). Pre-Dorset, the cultural substratum of Dorset, has been identified in the eastern arctic on the west coast of Hudson Bay, the Ungava Peninsula, and in parts adjacent to the Foxe Basin and northwestern Hudson Bay. In western Greenland and the Melville Peninsula, Arctic Small-Tool manifestations have been identified as "Sarqaq" by Jørgen Meldgaard (1952) and Larsen and Meldgaard (1958: 69). Sarqaq, according to Larsen and Meldgaard, may have post-dated Pre-Dorset finds on the west coast of Hudson Bay during its earlier phases. However, in later work, Meldgaard (1962) uses the term "Sarqaq" synonymously with "Pre-Dorset," indicating that the two subtraditions are not as mutually-exclusive as he first thought. In the far northeastern part of Greenland, a third early culture with similarities to the Arctic Small-Tool tradition has

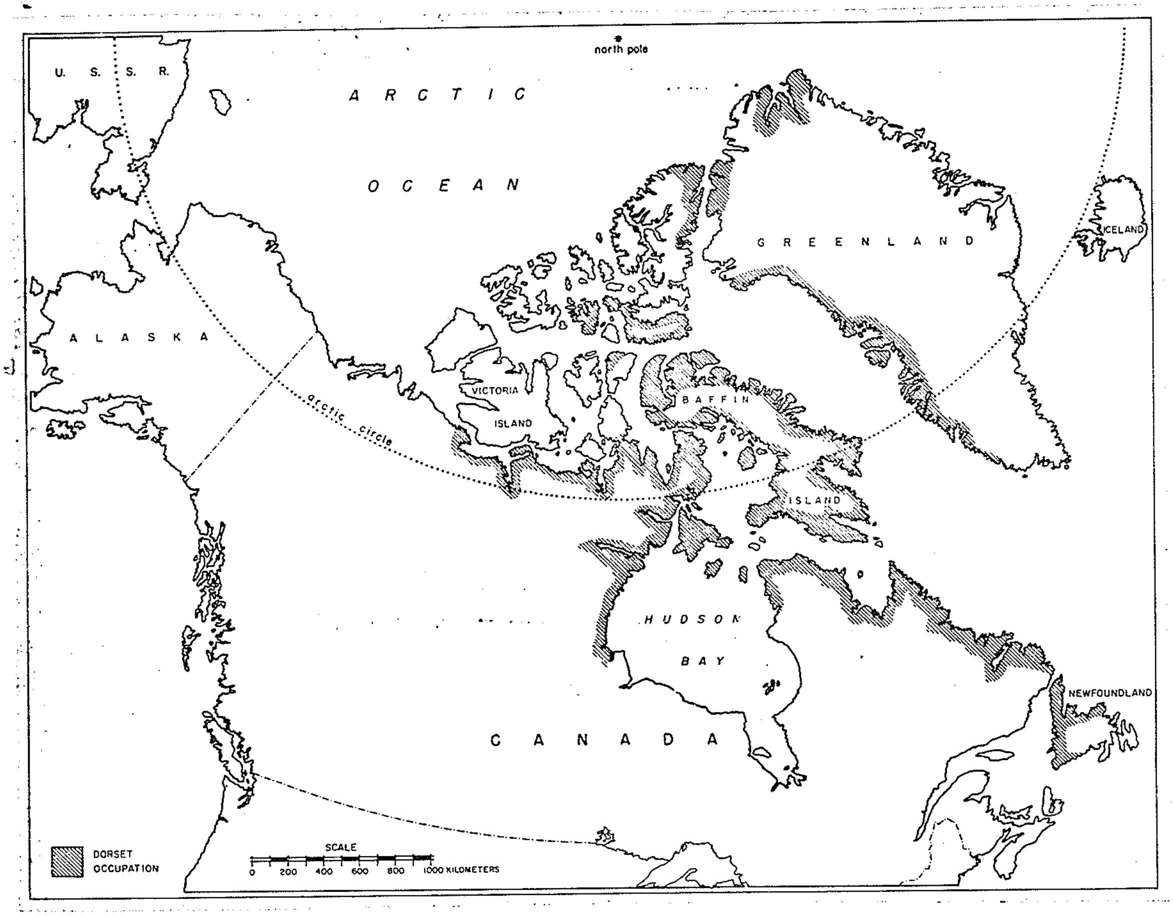


FIGURE 1

REGIONAL EXTENT OF THE DORSET CULTURE,
BASED ON THE DISTRIBUTION OF KNOWN DORSET SITES

(Modified from: Northwest territories and Yukon territory map, Department of Mines and Technical Surveys, Surveys and Mapping Branch, 1959) been described by Knuth as Independence I (1956: 77; 1958). Following Larsen and Meldgaard (1958: 70), Independence I may be the oldest manifestation yet of the Denbigh-like Arctic Small-Tool tradition in the eastern arctic, although it is now generally felt that this evidence does not pre-empt a western origin for Pre-Dorset phenomena.

To summarize current knowledge of Dorset prehistory, it is apparent that Dorset developed *in situ* in the eastern arctic from a Pre-Dorset or Sarqaq base with the addition of some traits originating presumably from Alaska. By 1000 B.C. a clearly defined Eskimo tradition was developing around Norton Sound in Alaska from the Denbigh complex, a resident Arctic Small-Tool tradition. Between 800 and 600 B.C., the transformation from Arctic Small-Tool cultures to Dorset was occurring in the eastern arctic, a change that may in part have been the result of diffusion from the west. However, as our knowledge of Pre-Dorset is enhanced through excavation, it may be shown that culture change at this time in the eastern arctic was influenced very little by Alaskan cultures and was mainly a story of local evolution. From the inception of recognizably "Dorset" material to the advent of the Thule, who were clearly an Alaskan product, the distribution of people across the Canadian Arctic increased to widely separated environments, from Newfoundland and Labrador to the arctic archipelago. Always, though, the Dorset people were essentially a maritime-based people, with an economy grounded in the exploitation of sea mammals with seasonal foci on caribou hunting, procurement of smaller land animals, and fishing.

William E. Taylor (1968: 1-8, 104-107) has presented an excellent overview of trends in research into prehistoric Dorset remains since their initial description by Jenness and, drawing from this source, it can be seen that ideas of Dorset origins and relationships to other cultures have not always developed from an overabundance of raw data, but have been often stated on the basis of minimal evidence. Several speculations of this sort have found their way into the body of basic assumptions held by arctic archaeologists and have subsequently been difficult to discard in the face of new evidence. For instance, ideas of Dorset origins in a subarctic, Indian environment held by a few individuals have long been contentious and have not been eliminated, at least in part, until the publication of Laughlin and Taylor (1960). Suggestions of Indian influences on Dorset material culture are still maintained by some investigators, although Taylor (1968) has considered them insignificant in Dorset culture development.

As theories of Dorset culture origins, artwork characteristic of the Dorset people has received considerable attention, particularly within the past decade. Its interpretation has often been influenced by the ways in which Eskimo art in general has been analyzed during the past century.

II. ESKIMO ART IN HISTORICAL PERSPECTIVE

During the mid- to late nineteenth century, a number of speculations about the descendents of Paleolithic man in Europe led to hypotheses of vast human migrations concurrent with the disappearance of reindeer, musk oxen, and other arctic-adapted animals from peninsular Europe. An archexponent of the theory of human migrations following large, cold-acclimated game as far as arctic North America, although not the first to suggest such a scheme, was Boyd Dawkins. In his first statement (1866) as well as in subsequent works (1874, 1880), Dawkins compared cultural elements of the Upper Paleolithic of Europe with those of historic Eskimo groups. From these comparisons, he concluded that the set of common traits was as great as had been shown to exist for any two cultures that were known to have diachronic relationships. Some of the traits included in Dawkins' comparative study were carvings in bone and ivory with engraved hunting scene motifs that were supposed to illustrate an affinity between the Paleolithic cave people of France and Belgium, and Eskimos of the North American and Siberian Arctic coasts (1874: 356).

Dawkins' theory of a relationship between the Upper Paleolithic cave dwellers and modern Eskimos was adopted and enlarged upon by other contemporary scholars as John Lubbock and Charles E. Rance. To Dawkins' evidence for an historical connection between Europe and Arctic North America was added physical anthropological evidence in the form of the Chancelade remains. At the time, the Chancelade find was reputed to represent a fossil man of a race different from Cro-Magnon and an attempt was made to show its affinity to Eskimo morphology (Dechelette, quoted in de Laguna 1932: 480).

Besides those who upheld Dawkins' general assertion of a "following-the-reindeer migration," there were others who were more skeptical of the evidence presented on behalf of Euro-american relationships. Some, including Hoffman (1897) and Laloy (1898), objected to Dawkins' scheme on the basis that a migration from Europe to America could not have taken place via the British Isles and Greenland (both ignoring the Bering Strait alternative). Furthermore, Hoffman dismissed Dawkins' European Paleolithic basis for Eskimo art with evidence that modern Eskimo art forms were attributable to contact with Russo-american explorers and traders.

A more recent review of the ensuing controversy over the possible origins of Eskimo art has been presented by Frederica de Laguna (1932-1933), the major trends of which appear to be alternation between the idea that Eskimo traits served as analogies toward explaining European Paleolithic remains and that actual homologies existed. For our purposes, it is important to note the origins of speculation about the Old World affinities of Eskimo art in general, in order to gain some idea of the reasons why this kind of interest exists today.

To the question of Upper Paleolithic origins for Eskimo cultures, de Laguna (1932-1933) added an historical element, the proto-historic Thule. In her intensive comparison of Eskimo and Paleolithic art, de Laguna surmised that even with knowledge of the time depth of Eskimo cultures that was current during the late 1930's, the possession of mere similarities in art between European Paleolithic cultures and the New World Eskimo were not sufficient to indicate a Paleolithic origin for Eskimo art (1933: 99, 103).

Contemporary with de Laguna, Kaj Birket-Smith (1937) published a critique of Dawkins' theory, reviewing the cultural aspects of the controversy while temporarily suspending comment on physical anthropological evidence for an Upper Paleolithic origin of the Eskimo. Basically, Birket-Smith saw Dawkins' hypothesis as fanciful, although it has stimulated thought on other Old World centers of origin for Eskimo cultural traits. As yet unprovable with archaeological evidence at the time of Birket-Smith's writing, it was pointed out that some elements of Old Bering Sea art may have had antecedents in the late stone age of eastern Asia (1937: 295).

Within the last three decades, our knowledge of Eskimo prehistory has been greatly enhanced, revealing a picture of Siberian antecedents to the earliest Eskimoid flint complexes of Alaska and the eastern arctic. Don E. Dumond (1965), for one, has reconstructed Eskimo prehistory using both archaeological and linguistic data and suggests that the Eskaleutian-Chukotian linguistic stocks shared a common ancestor by at least 12,000 to 14,000 B.C. In other words, the origins of the Arctic Small-Tool tradition are to be found in far eastern Asia. But the question of affinities of prehistoric Eskimo peoples to ancient cultures in parts of the Old World outside of eastern Siberia remains a moot point, at least for the present.

Recently, William E. Taylor and George Swinton, in two related articles (1967), have examined objects of Dorset art from the Canadian Arctic, and have suggested a common base from which Dorset and some western Alaskan art forms have emerged. In the same article, Swinton argued for a re-evaluation of prehistoric Eskimo-Old World art connections, using evidence of Dorset and other Eskimoid remains that were not yet known at the time de Laguna published her comparison of Thule and Upper Paleolithic art (1967: 35). For Swinton, not only are there counterparts to Dorset art in the Siberian Paleolithic, but there are hints of Indian influence in Dorset artwork that may find its origins in the Eurasian Woodlands.

At first glance, it appears that Swinton has attempted to revive Dawkins' scheme of "following-the-reindeer" to the New World, but in fact the hint of similarities between Northwest Coast Indian and Dorset art has led to the hypothesis of a common origin for the two expressions (1967: 35). Dawkins, it must be remembered, propounded a theory that had little substantive support and has since been shown to be in error with regard to logic: the mistake of assuming homologies where only analogous features existed. On the other hand, the substantive contribution of Swinton has been to renew attention to Old World precursors of Eskimo art, using present knowledge of Eskimo prehistory for the purpose of explaining subtle similarities in art form between Ipiutak, Okvik, ancient Aleut, Northwest Coast, and Dorset cultures.

Until the early twentieth century, Eskimo art had generally been viewed from the perspective of Old World affinities. For the most part, this was due to the influence of Dawkins, some of his contemporaries, and followers who were interested in explaining the life-ways and fate of prehistoric European cave-dwellers--people of the Upper Paleolithic.

Probably through the influence of Franz Boas, as much as anyone else, speculation of Old World-Eskimo connections became secondary to a particularist approach of describing Eskimo materials and deriving trait origins only when they could be demonstrated. As seen through the publications of de Laguna (1932-1933) and Birket-Smith (1937), the question of European Paleolithic affinities of Eskimo art became a matter for sober thought and was realized as a complex problem for which there was no immediate solution. The question of Old World affinities of Eskimo art in general and Dorset art in particular has been echoed recently by Meldgaard (1960) and Swinton (1967), but the more immediate problems of function of art in Dorset society, and regional and temporal variations in style are those that have received the most attention during the past few decades.

III. DORSET ART

Since the definition of the Dorset culture by Jenness (1925), there have been intermittent attempts to describe and posit functions for its artwork. The uniqueness of Dorset art, a characterization that seems to accompany any description of its form and surficial incised treatment, is found mainly in its small size and portrayal of its subject matter from realistic to abstract (cf. Collins 1961: 25; Meldgaard 1960; Taylor 1965: 8;

Taylor and Swinton 1967: 7-8; and Taylor 1968: 86). Comparisons of Dorset to ethnohistoric examples of Eskimo art, most notably Angmagssalik, have been made by a few researchers as a partial basis for positing functions of the prehistoric work (Taylor 1965: 8; Collins 1961: 25-26). The close resemblances of some Dorset pieces to those in the Angmagssalik repertoire, together with aspects of Angmagssalik prehistory, have led to hypotheses of a Dorset base for what was historically the Angmagssalik culture. Given an historical connection between the two cultures, it is indeed likely that ethnographic analogy as to function of art in prehistoric Dorset societies may be fairly sound. However, analogy has also been carried to groups of the Iglulik, Central, and Labrador Eskimo by other investigators (cf. Taylor 1968; Taylor and Swinton 1967: 39). Functions suggested by reference to the ethnographic literature have included those associated with shamanistic practices (ritual "flights" and curing), burial practices, hunting magic, personal protection, and purely decorative objectives for embellishing hunting, gaming, and culinary implements.

Besides the minuteness and relative degrees of abstraction of Dorset art, it has been described as representing both animals and humans, the latter in the minority, and displaying numerous incised motifs that appear repeatedly. Most common on animal forms, but also occurring on abstract objects of bone, antler, ivory, and wood are skeletal motifs that are variously portrayed as a crossed line extending down the length of the back of an animal figure, elongated lines incised on the legs, cross motifs inscribed on the head and joints of the miniature animal, and parallel-oblique lines emanating from the longitudinal back line. These incised embellishments have been described as symbols for various parts of the animal skeleton, the same interpretation for which has been given similar motifs found on non-animal forms such as spatulate-shaped objects and antler containers.

These elements of Dorset art have led to hypotheses about regional stylistic differences in the Dorset culture, trends in temporal change in the art, and functions of the objects that vary from exclusively shamanistic uses to children's toys. This diversity of thought on Dorset art has in the past been based on visual examinations of the artifacts and lists of attributes ascribed to each piece. Because the inventory of art objects from any given site or group of sites has been small, it has not been necessary to elaborate the methods of recording or analysis and, hence, little actual effort has been afforded a detailed statistical treatment of the attributes.

However, over the past two decades, the wealth of excavated Dorset material has increased markedly. Included in this increase have been enough objects of art to begin considering more sophisticated methods of analysis than heretofor used. Questions of function, regional and temporal variation that are still largely unanswered, but that have attracted much speculation, are appropriate areas on which to concentrate the efforts of a statistical analysis of Dorset art. And, as statistical methods specifically designed or modified for use with archaeological data have become refined and the body of analyzable data increased, we now have a better chance to test existing hypotheses than was previously possible.

The purpose of this thesis is to apply several statistical methods to the description of Dorset art and cross-tabulation of certain "design" attributes in order to establish a means by which regional styles, temporal changes, and functions may be explicated. Results of the following study should be considered tentative and subject to change concurrent with advances in statistical methods, methods of data collection, or simply increases in sample size. The intent of the present study is to initiate systematic analysis of Dorset art. The analysis is directed toward answering the archaeological questions posited above, as opposed to questions of art as art. The focus of interest is in the activities reflected by the material manifestations of art in the Dorset culture and culture variation and change symbolized by variation in art style. As pointed out by Swinton (1967: 35), the "content" or intrinsic attitudes represented by Dorset art objects and attributes is very important and if we could suggest actual meanings relative to the Dorset people, we would have in hand a good deal of cultural reconstruction. However, by the very nature of archaeological data, it is not possible to derive definitive cultural meanings from artifact forms in themselves. We can approximate their meanings through a statistical analysis of their attributes and contextual associations provided sample sizes are adequate. The basic course of such research is to isolate styles, whether significant from a synchronic and/or diachronic viewpoint. Through the use of independent archaeological data other than the art pieces involved and a guiding hypothesis of the functions of particular stylistic elements in a given time and place, we may arrive at a reasonable approximation of its general functions in the prehistoric society. Thus, "content," in a sense, can be defined to a certain degree and it can be compared with the content of an art piece or series of pieces derived from research in another geographic region or time period. At this point, I am re-emphasizing that archaeologists are interested in "content" as defined by Swinton, but the means at arriving at its definition are not always present due to the vagaries of preservation or an inadequate sample. It is with attempts to define the cultural content of Dorset carvings that much controversy has been stirred in the past few years and, with the preliminaries of describing spatial and temporal variation, the focus of this thesis will turn to presenting the groundwork from which content or functions of Dorset art may be posited.

Stated in terms of hypotheses that can be tested, it is asserted that:

1. Dorset art exhibits regional styles that are closely related with regard to subject matter, but differ in precise representation.
2. Temporal changes within regions do not necessarily reflect a general "realistic to abstract" trend in the development of artwork, but may be random, unchanging or progress from abstract to realistic in style.
3. Dorset carvings were not manufactured and used exclusively by shamans, but saw general use in a variety of activities.

Each of these hypotheses is based on the idea of testing propositions based on ideas presented in past research (*viz.*, that of Collins 1961; Meldgaard 1960; and Swinton 1967, respectively). By modifying the assertions of these writers on the nature of Dorset art into testable hypotheses, we may perform the twin functions of preparing them for analysis using systematized data, and use them as the base for demonstrating the applications of particular statistical tests to certain archaeological problems. In the present study these tests are limited to eastern Canadian Dorset art and they do not encompass the entire area in which Dorset remains have been found.

CHAPTER II

METHODS AND TECHNIQUES

In the present analysis, 250 Dorset artifacts were studied and photographed in two Canadian repositories: the National Museum of Man, Ottawa, Ontario, and the Eskimo Museum in Churchill, Manitoba. The artifacts represent small carvings of humans or animals, functional and non-functional tools, tubes, perforated animal teeth, paddle-form objects, thin discs, "shaman's teeth," and some unidentified fragments (Table I). The total collection includes artifacts from sites in northeastern Hudson Bay (Coats and Mansel Islands), the Hudson Strait region (Andrew Gordon Bay, the Tyara site, and Lake Harbour), the Melville Peninsula and northern Foxe Basin area (Iglulik, Hall Beach, Alarnerk, Birket, Kaersut, Rowley and Jens Munk sites), eastern Baffin Island (Clyde Inlet), and Bylot Island (Button Point) (Figures 2 and 3). Methods of collection from these sites have varied from casual surface collection by modern Eskimos as represented by the Burwash assemblage from Coats and Mansel Islands, to detailed scientific excavation at sites in the Melville Peninsula region and in the Hudson Strait area. Because the sample is not very large, no attempt has been made to statistically stratify it in any way.

TABLE I

CATEGORIES OF DORSET ARTIFACTS STUDIED (ABSTRACTED FROM TABLE VI, APPENDIX A)

Artifact Category	Frequency	Percentage
Human figures, masks and maskettes	18	7.2%
Sea mammals	31	12.4
Land mammals	22	8.8
Birds	4	1.6
Composite mammals	6	2.4
Hunting implements (includes harpoon heads and lance blade)	9	3.6
Miniature, non-functional harpoon heads	10	4.0
Antler section tube pieces	52	20.8
Tubes	11	4.4
Perforated animal teeth	3	1.2
Paddle-shaped objects	13	5.2
Thin discs	36	14.4
Shaman's teeth	4	1.6
Unidentified fragments	31	12.4
Total	250	100.0%

FIGURE 2

ARCHAEOLOGICAL SITES AND LOCALITIES IN THE CANADIAN ARCTIC REPRESENTING PROVENIENCES OF ARTIFACTS USED IN THE PRESENT STUDY

(Modified from: map of Canada showing location of Indian bands with linguistic affiliations, Indian Affairs Branch, Department of Citizenship and Immigration, 1965)

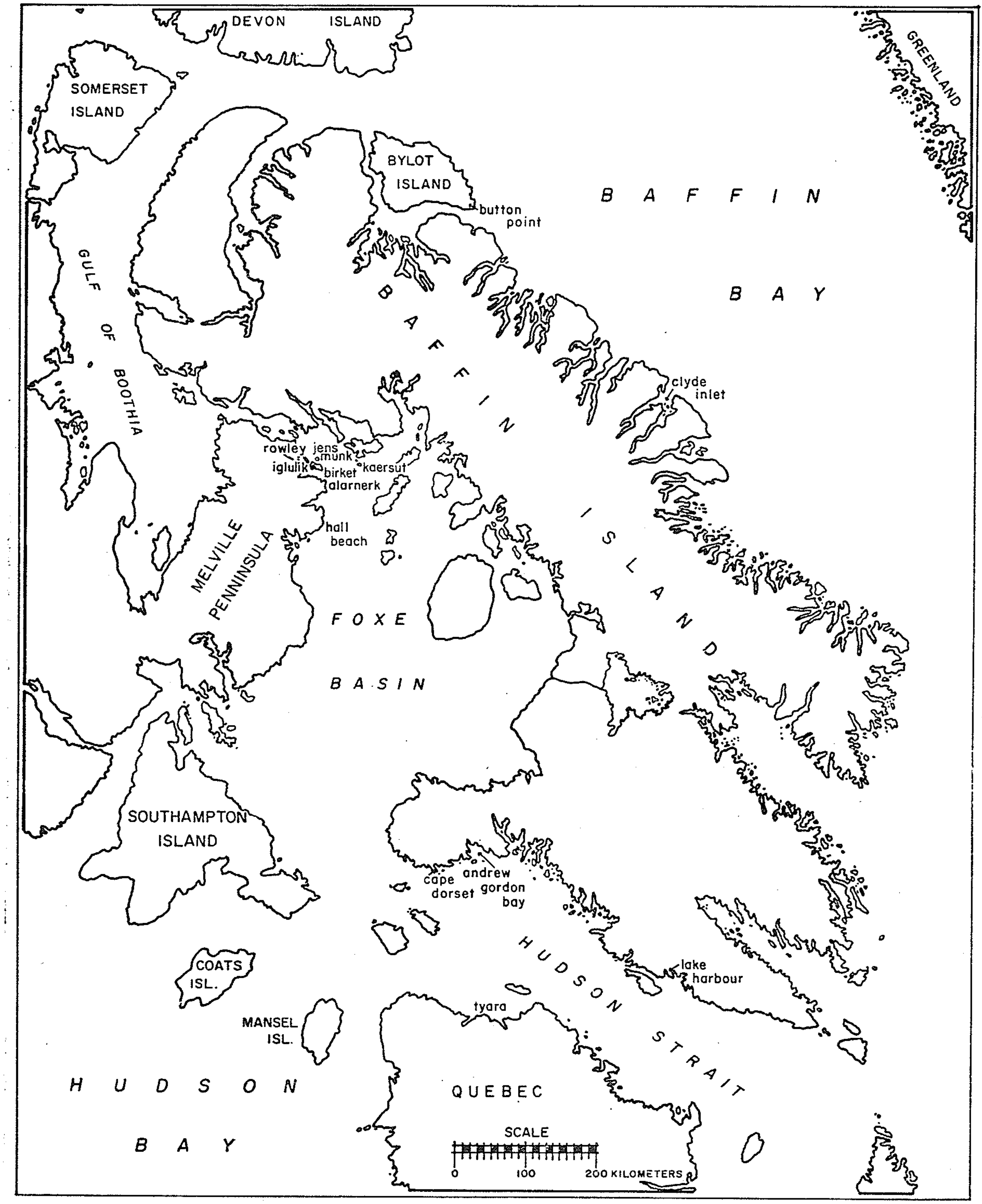
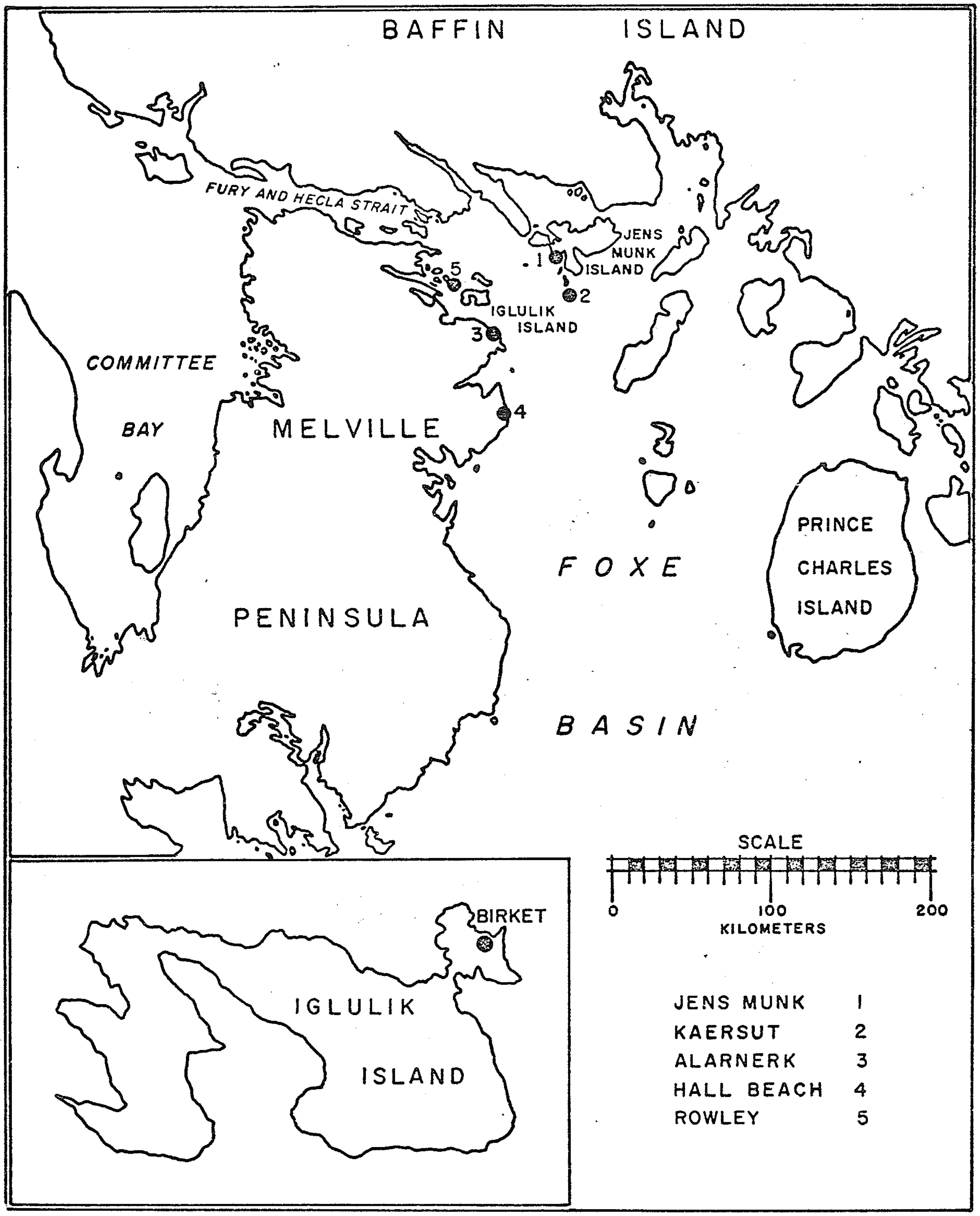

DEVON ISLAND
GREENLAND
SOMERSET ISLAND
BYLOT ISLAND
button point
BAFFIN BAY
GULF OF BOOTHIA
BAFFIN ISLAND
clyde inlet
rowley
jens
munk
iglulik
birket
kaersut
alarnerk
hall beach
MELVILLE PENNINSULA
FOXE BASIN
SOUTHAMPTON ISLAND
cape dorset
andrew gordon bay
HUDSON STRAIT
lake harbour
COATS ISL.
MANSEL ISL.
tyara
HUDSON BAY
QUEBEC
SCALE
0
100
200 KILOMETERS

FIGURE 3

ARCHAEOLOGICAL SITES IN THE IGLULIK AREA
NORTHWEST FOXE BASIN

(Modified from: map of Canada showing location of Indian bands with linguistic affiliations, Indian Affairs Branch, Department of Citizenship and Immigration, 1965)


BAFFIN ISLAND
FURY AND HECLA STRAIT
JENS MUNK ISLAND
1
2
5
IGLULIK ISLAND
3
4
COMMITTEE BAY
MELVILLE PENINSULA
FOXE BASIN
PRINCE CHARLES ISLAND
SCALE
0
100
200
KILOMETERS
BIRKET
IGLULIK ISLAND
JENS MUNK 1
KAERSUT 2
ALARNERK 3
HALL BEACH 4
ROWLEY 5

The number of artifacts from each site that is considered in this analysis was limited only by its accessibility for study. Because of the nature of this inquiry, it was deemed necessary to observe the art first hand, as opposed to the extensive use of photographs, hence time and financial arrangements were also limiting factors.

Nonetheless, the sample of Dorset art covers a wide area of the eastern Canadian Arctic that, with the exception of Greenland, parts of northwestern Hudson Bay, areas of the arctic archipelago and Newfoundland, coincides with much of the geographic region considered as the spatial extent of the Dorset culture. Sites in Newfoundland, part of the area that has been omitted from this study, have revealed art that has sharp distinctions from Dorset material to the north (Harp 1969). Although access to these collections was provided in the early stages of the present work, the research goals were limited to the large area north of Newfoundland and west of Greenland for the purposes of erecting representative descriptive models and suggesting functions in an area that appears to have been relatively homogeneous, culturally speaking. Because the Newfoundland material was distinct from the northern collections and because of the impracticality of obtaining artifacts from Greenland Dorset sites, it was necessary to maintain these limiting factors in the research design.

I. PROCEDURES FOR TESTING HYPOTHESES

During the past decade, there has been a growing trend in American archaeology toward a scientific treatment of archaeological entities beyond the use of inductive schemes and simple frequencies of quantified data used to support conclusions. Through the publications of Binford (1962, 1964, 1965 and 1968), Hill (1966, 1968), Longacre (1970, 1972), Fritz and Plog (1970), Watson, LeBlanc, and Redman (1971) among others, the discipline has seen a shift in methods from basically historical to processual orientations to archaeological problems. Lewis R. Binford, for one, has characterized the two views as the "traditional" and "new perspectives" approaches, respectively. With the fundamental shift in method, there has been an accompanying increase in interest of quantifying data for use in statistical operations that are designed to test explicitly-stated propositions.

From the early 1950's, the increasing concern for quantifying data and statistically testing hypotheses about prehistoric patterns and change has converged with the increasing sophistication of computer science and its adaptability to archaeological problems. Commensurate with changes in analytic techniques, a few researchers have promoted the idea of formal scientific approaches to problems of cultural reconstruction and delimitation of the causes for change. The hypotheses or propositions, in turn, are expected to be in a form such that they can be tested by quantitative data (as opposed to logical tests), the results of which would be applicable to solving higher levels of problems than previously possible.

In the case of Dorset art, testable hypotheses about stylistic variation on regional and temporal bases form the nexus for an hypothesis on the function of art in Dorset societies. A series of hypotheses, in this respect, are useful as each fulfills the function of controling certain variables while testing the effects of others in a given situation. Hence, while spatial variation and function in Dorset societies is assumed as a constant, the art is analyzed with respect to the temporal change of its elements.

The aim of testing each set of variables (elements of regional variation, temporal change, and function) is the construction of models that are intended to approximate cultural reality. Defined by David Clarke (1968: 32-33), models can take three forms: iconic, analogic, and symbolic. Iconic models are basically descriptive. They are a means for condensing descriptive information and are quite common in archaeological analyses (e.g., diagrams, histograms and distribution maps). The analogue model fits ethnographic and general anthropological information to an archaeological situation, both of which seem similar in outward appearances. Symbolic models are the most sophisticated kind of conceptual scheme in which observed phenomena are represented as symbols (as in iconic models) but, unlike iconic models, symbolic schemes express interrelationships between the attributes that can be demonstrated mathematically. Although one of the aims of this thesis is to lay the foundations for the eventual construction of a symbolic model representing the interrelations of regional variation, temporal change and functions of Dorset art, simple iconic models of variation and change and analogue models of function will be presented as a start in this direction.

To arrive at any of the above models, it is first necessary to test the three propositions stated above. For each, a number of test implications have been constructed, the design of each one intended to contribute to the validation (or invalidation) of the hypothesis. As the best kind of hypothesis is that which can be proven wrong, the attempt has been made to frame questions of Dorset art stylistic variations such that available data could be used to either confirm or refute the propositions, or to provide a basis for future analytic treatment that would lead to a positive solution.

Restated, the three hypotheses about the nature of Dorset art and its relationships to Dorset culture are given below with the addition of test implications for each. I am omitting here arguments of relevance (Fritz 1973: 61), as the following hypotheses are generated from assertions and partial documentation discussed by several authors: Collins (1961) for the first hypothesis; Meldgaard (1960) for the second; and Swinton (1967) for the third. However, the following test implications are elaborated later in Chapter IV when statistical patterns of artifact attributes are described.

1. Dorset art exhibits regional styles that are closely related with regard to subject matter (the form of the artifact) but differ in precise representation (incised elements).

Test Implications:

A. There is uniformity in frequencies of carved shapes from sites sampled (*viz.*, all of the sites are highly correlated on the basis of representation).

B. There is variation in attributes associated with specific loci on particular carvings with respect to their elaboration (e.g., a skeletal motif, with variation in the way in which the spinal column is represented). Uniformity of execution of the design would be seen in material from one or a set of sites, but differing in some respects from others.

2. Temporal changes within regions do not necessarily reflect a general "realistic to abstract" trend in the development of art work, but may be random, unchanging or progress from abstract to realistic in style.

Test Implications:

A. Chronologically arranged specimens from particular sites show uniformity or randomness with regard to the degree to which they approach realistic depiction of a concrete entity. This test will be limited to those sites that have been absolutely or relatively dated.

B. If there are a series of changes in the manner of depicting subject matter through a time sequence, the transformations are progressive from abstract to realistic representations.

3. Dorset carvings were not manufactured and used exclusively by shamans, but saw general use in a variety of activities.

Test Implications:

A. Using ethnographic accounts we would not expect to find what ethnographically would be considered articles from a shaman's kit in presumably non-shamanistic contexts.

B. Carvings would be found at random: in houses, midden, and occasionally in burials.

In preparation for testing these hypotheses, it was necessary to order the data so that attributes of Dorset artwork could be systematically identified and encoded on IBM computer cards. The key to any analytic procedure is the manner in which the attributes have been encoded, a summary of which is given in Table II. Basically, each computer card represents an artifact with all attributes encoded that are pertinent to this study. The card is identified by a number; a simple numeric listing from 1 to 252 was used in place of the catalogue number given by the institution retaining the material. In succeeding columns from left to right, the site or locality, height in meters above present sea level, find unit (house, midden or burial), material, conventionalism (two dimensional-abstract, two dimensional-realistic, etc.), representation or form (walrus, seal, etc.), and incised attributes are given. If level and find unit were not recorded at the time of collection of the artifact, the appropriate columns are left blank. All of the attributes used in the present analysis were selected with the objective that they would help delineate regional styles, temporal change, and functional variability of Dorset art.

Computer programs for the analytic phase of this study were written and tested on an experimental basis, using the University of Manitoba's IBM 360/65 computer. The initial results included the successful implementation of a frequency distribution program that, unfortunately, solved only part of the problem of testing the above hypotheses. However, several programs adaptable to the analysis of Dorset art attributes were available for use with the University of Arizona's CDC 6400 computer--programs that also appeared to be adaptable to general archaeological problems. Points critical in their selection to the exclusion of others were capacities for handling non-metric data. Although there has been a growing trend in archaeological research to quantify data, there are still large portions of material that remain discrete. It has particularly been against statistical programs biased toward metric data and the archaeologists' misuse of such analytic techniques that some criticism has been directed in recent years. A review of these criticisms combined with a description of statistical methods used in the present study is presented in the following sections.

II. STATISTICAL TESTS

Archaeological research with statistical methods over the past twenty years have focussed mainly on seriation techniques (Robinson 1951; Brainerd 1951; Ascher and Ascher 1963; Kuzara, Mead and Dixon 1966) and the construction of typologies (Binford and Binford 1966, 1969; Sackett 1966; Spaulding 1953; Benfer 1967). Of the range of statistical methods available to social scientists, experimentation particularly with typologies of archaeological data appear to have concentrated on the use of contingency tables and chi-square tests and factor analytic techniques. Debates of the merits of both techniques have been presented (cf. Benfer 1967 and Sackett 1969), creating a cause for questioning their respective ranges of application.

For purposes of the present analysis, these questions had to be resolved before the study could proceed. Given the research goals (propositions and test implications), a range of possible appropriate statistical methods was reviewed and a final decision of which techniques to use was weighted in the direction of published critiques and outside statistical consultation.

Statistical Techniques and Proposition Tests

The propositions and test implications outlined in the last major section can be summarized as mainly problems of association. Given a number of sites, features, artifacts, and artifact attributes, the questions revolve around the existence, direction, intensity, and nature of association relationships between them. No one particular question deals with the covariation of all of these variables simultaneously, but each centers on two or more different kinds of data with the intention of proving or disproving the proposition. In some cases, the data compared for the purpose of establishing particular associations are quantifiable. That is, the data include characters measurable on a scale, whether that scale be of equal and additive units (e.g., a metric scale) or one in which the units are not equal and additive (e.g., relative scales as used in comparing small, medium, and large things). In other cases, the data are composed of non-quantitative characters in the sense that they are qualitative but enumerable. Three of the tests of propositions include both quantifiable and non-quantitative characters, a situation that allows for the use of more sophisticated statistical operations than can be carried out with data that have only non-quantitative characters. However, the data for the present study are mainly non-quantitative, a situation that produces limitations on the kinds of statistical methods that may be used in measuring association between variables.

In determining the possible kinds of statistical methods that could be used in testing the propositions, each test implication was classified as to the types of data that were to be used in its analysis. It was found that proposition/test implication 1A, 3A and 3B involved non-quantitative to the exclusion of quantitative characters. Proposition/test implication 1B, 2A and 2B involved a combination of quantifiable and non-quantitative characters, reflecting the inclusion of data not used in 1A, 3A and 3B. Through a review of the relation of quantitative and non-quantitative data *vis-a-vis* particular statistical methods (cf. Clarke 1968; Hagood and Price 1952; Blalock 1972; and Moroney 1951), it was found that the use of contingency tables and chi-square, analysis of variance and analysis of covariance techniques could each apply to some aspect of the present study.

The construction of a contingency table and tests for the presence of association by using the chi-square formula was the only alternative method that could be used in some of the problems. However, a few instances occurred where contributions to cells within a contingency table were small (i.e., under 21), in which case the Fisher's Exact Test was used to compute exact rather than approximate probabilities.

The strength of relationship between two or more variables can be tested using several different approaches, the most common based on the value of chi-square. Two tests, Cramer's V and Pearson's Contingency Coefficient C, are both easy to compute and measure the strength of association between two sets of data even though there may be a marked difference between both the size of the samples and their respective chi-square values.

Quantitative vs. Non-quantitative Variables

Unlike chi-square tests, if nominal or basically non-quantitative data are used in conjunction with analyses such as factor analysis to test associations between variables, they must be coded such that they are ranked with regard to some kind of scale. If this procedure is to be carried out, the data must be amenable to ranking in a meaningful fashion.

A clear example of the problems inherent in converting non-quantitative to quantitative variables is given in two recent articles in the *American Anthropologist* (cf. Benfer 1967 and Sackett 1969). Robert Benfer attempted to classify an assemblage of paleo-Indian projectile points from Texas with respect to the covariation of particular attributes using a factor analysis. To avoid the difficulty of transmuting non-quantitative to quantitative characters, Benfer chose some attributes (measurements of width, thickness, length, etc.) not usually considered by archaeologists as important variables in the classification of projectile points, and ranked some non-quantitative variables on a numerical scale. Still other attributes were codified on a presence-absence basis. James Sackett, in his discussion of Benfer's approach to analyzing the association between attributes for the purpose of classifying point types, argued that artifact typologists do not usually supply the kinds of data amenable to factor analysis and that generally the data cannot be converted to quantitative variables without promoting the possibility of obtaining spurious results.

A position similar to the one taken by Sackett (1969) has been voiced by G. F. Atkinson (personal communication, February 1970). Atkinson reviewed the data accumulated for the present study and suggested that since most of the variables involved were of a non-quantitative or discrete nature, the use of contingency and chi-square remained one of the best methods to test problems of association. Nearly all of the attribute sets are composed of mutually-exclusive alternatives, in which case there is a high degree of interdependence of variables. In other words, because one variable of a set is applicable to a particular category of artifact, it automatically rules out any possibility that other attributes of the set occur in association with it. The use of factor analysis precludes that the attributes within a set be independent of one another (i.e., in the sense that they are not logically mutually-exclusive) and that they express a dimension of variation either in a metric scale of measurement or in terms of presence or absence. The use of factor analysis would dictate either the use of different criteria with which to characterize Dorset art or the codification of existing non-quantitative attributes such that they are independent and express a dimension of variation. Neither of these alternatives have been implemented because it would mean a departure from traditional ways in which Dorset art has been seen and studied. However, this does not mean that it would be impossible to profitably explore ways in which to quantify the data of Dorset art, rather it is believed that a beginning in using statistical methods to test hypotheses about the interrelations of Dorset culture and its art should start with existing modes of classifying the attributes of Dorset art.

Computer Program

For the purpose of testing associations between variables of Dorset art, a contingency and chi-square set of techniques was adopted in the form of a computer program written in Fortran IV, developed on the IBM 360, and later translated to the CDC 6000 series equipment. The program itself is termed "Crosstabs" and is a subprogram in the *Statistical Package for the Social Sciences* (Nie, Bent and Hull 1970). Crosstabs produces a contingency table, each cell of which includes the actual frequency of the correlation, percentage contributed to the column, percentage contributed to the row, and percentage contributed to the total number of cells. The table also gives row and column totals and their respective percentages that contribute to the total number of cases (artifacts, in this case). The following statistics were applied:

1. Chi-square and degrees of freedom (the chi-square value is adjusted for 2 X 2 tables where sample is less than 21 cases by using the Fisher's Exact Test, while all other tables are corrected for their chi-square value using Yate's correction).
2. Corrections to adjust chi-square so that it is directly proportional to the total number of cases (Phi for 2 X 2 tables; Cramer's V for tables larger than 2 X 2). Unity for Phi is .707. Unity for Cramer's V is 1.00000.
3. Pearson's Contingency Coefficient.

It should be added that the Chi-square statistic that is given for tables run on the Crosstabs subprogram tests the independence or lack of statistical association between variables. In this sense, the statistic does not measure the degree of association but it only indicates the probability of having a distribution ". . . as different from statistical independence by chance alone as the observed distribution" (Nie, Bent, and Hull 1970: 275).

CHAPTER III

DESCRIPTIVE ORGANIZATION

Table II illustrates the encoding format used in the present study. The format in which the attributes of Dorset artifacts are distributed was constructed such that each computer card represents an artifact, the card columns consecutively listing the artifact identification number, provenience, and physical attributes (stylistic elements). The following descriptive sections provide a background to the organizational requisites of the encoding format, list the attributes used in the study for the purpose of testing hypotheses, and summarize their frequencies of occurrence within the sample.

Before continuing, it is important to define a few terms that may otherwise be confusing. In the present study, the basis for analysis are certain attributes of artifacts that have been termed "Dorset Art" forms. These artifacts consist mainly of tools, containers, ornaments, toys, and possible amulets. Embellishments on these items and often the forms themselves can be segregated into a number of categories as seen in the example of "skeletal motifs" mentioned in Chapter I. These categories are comprised of discrete features that, for the purposes of the present study, comprise "stylistic elements." Each

TABLE II

ENCODING FORMAT FOR DORSET ART ATTRIBUTES

Columns	Code	Description
1-3		Artifact Number
4 (blank)		
5-6		Site or Locality
	01	Alarnerk site
	02	Birket site
	03	Hall Beach site
	04	Rowley site
	05	Kaersut site
	06	Jens Munk site
	07	Coats and Mansel Islands (Holm and Burwash collections)
	08	Lake Harbour (Nichols collection)
	09	Button Point (Rousseliere collection)
	10	Andrew Gordon Bay (I)
	11	Clyde Inlet
	12	Tyara site
	13	Iglulik
7 (blank)		
8-9		Level (meters above sea level--leave blank if unknown)
10 (blank)		
11		Find unit (leave blank if unknown)
	01	House
	02	Midden
	03	Burial
12 (blank)		
13		Material
	01	Ivory
	02	Bone
	03	Antler
	04	Steatite
	05	Wood
	06	Tooth
	07	Shell

TABLE II (cont.)

Columns	Code	Description
14 (blank)		
15		Conventionalism (leave blank if undetermined)
	01	Three dimensional realistic
	02	Three dimensional abstract
	03	Two dimensional abstract
	04	Two dimensional realistic
16 (blank)		
17-18		Representation (leave blank if unclassified)
	01	Complete human
	02	Human mask or maskette
	03	Complete bear
	04	Bear head
	05	Complete seal
	06	Complete walrus
	07	Walrus head
	08	Walrus tusks
	09	Complete owl
	10	Complete goose
	11	Goose head
	12	Complete whale
	13	Complete falcon
	14	Miniature harpoon head
	15	Full-sized harpoon head
	16	"Shaman's teeth"
	17	Paddle-shaped object
	18	Tube
	19	Weasel
	20	Caribou
	21	Caribou hoof
	22	Caribou head
	23	Thin disc
	24	Lance blade
	25	Antler section tube fragments
	26	Tooth
	27	Dog
	28	Multiple representation: opposing bear heads

TABLE II (cont.)

Columns	Code	Description
	29	Multiple representation: bear heads at either end of a single thorax
	30	Multiple representation: bear heads and thoraxes at opposites
	31	Multiple representation: opposing walrus heads
	32	Multiple representation: opposing caribou and bear heads
	33	Multiple representation: weasel heads at either end of a single thorax
19 (blank)		
The following categories are encoded on a presence-absence basis where: Blank space = not observable or unsure, 0 = not present, and 1 = present.		
		ATTACHMENT PERFORATIONS
20		Attachment perforation(s) at or near proximal end
21		Attachment perforation(s) at or near medial position
22		Attachment perforation(s) at or near distal end
23 (blank)		
		OTHER PERFORATIONS
24		Slot perforations covering surface of artifact
25 (blank)		
		INCISED SLOTS
26		Single ventral slot without insert
27		Single ventral slot with insert
28		Double ventral slot without inserts

TABLE II (cont.)

Columns	Description
29 (blank)	
	SPINE REPRESENTATIONS
30	Single incised medial line on back (sometimes occurs on ventral surface)
31	Double medial line on back
32	Double medial line on back with parallel bars
33	Double medial line on back with enclosed chevrons
34	Single medial line on side
35 (blank)	
	RIB REPRESENTATIONS
36	Two sets parallel-oblique lines on upper back
37	Two sets parallel-oblique lines on mid-back
38	Two sets parallel-oblique lines on lower back
39 (blank)	
	RIB OR PERIPHERAL NERVE REPRESENTATIONS
40	Short parallel lines (intersecting medial, longitudinal line) on upper back
41	Short parallel lines on mid-back
42	Short parallel lines on lower back
43	Short parallel lines on entire back
44	Short parallel lines on side (intersecting medial, longitudinal line on side)
45 (blank)	
	LIMB REPRESENTATIONS
46	Crosses at joints
47	Rings or lines around appendages located at or near joints
48	Rings or lines around appendage(s) with no specific location
49	Lines running longitudinally down appendages
50	Parallel-oblique lines radiating from a medial position on the limb shaft

TABLE II (cont.)

Columns	Description
51 (blank)	
	NECK AND HEAD MOTIFS
52	Multiple ring(s) around neck
53	Crosses behind or in front of ears
54	Cross on top of head
55	Cross between eyes and extending over face
56	Line or slot medial between eyes
57	Nostrils
58	Line with intersecting shorter lines indicating mouth
59	Line without intersecting lines indicating mouth
60	Latitudinous lines covering face
61	Latitudinous lines below mouth only
62 (blank)	
	OTHER INCISED MOTIFS
63	Human face motif
64	Crosses
65	Longitudinal line(s)
66	Parallel lines perpendicular to longitudinal axis of artifact
67	Line(s) diagonal to longitudinal axis of artifact
68	Lines radiating from a central point
69	Longitudinal line with cross arms

element in a category (e.g., longitudinal lines, crosses, and chevrons) contributes to a configuration that is estimated to have significance in the aboriginal cognitive system (although it may be only a reflection of the archaeologist's intuition). A number of stylistic elements that are so related constitute a "motif." In the case of the example already used, longitudinal lines, crosses, and chevrons incised on the dorsal side of an animal form represent a spine motif. The form of certain motifs (in other words, their stylistic element constituents) may constitute a particular art style.

I. DESCRIPTION OF ATTRIBUTES

For purposes of contingency and chi-square analyses, as well as facilitating mechanical sorting of attributes encoded on IBM cards, a single format was designed to record discrete attributes of artifacts used in this study. Although the categories of physical attributes are not arranged in any particular order, the provenience of each artifact is handled in a fashion that allows for mechanical sorting or isolating specific artifacts that occur in a particular find unit, on a particular beach terrace or level, and in a given site. The usefulness of this arrangement becomes apparent when specific find units or beach terraces must be isolated within particular sites to show change in art styles through time and space.

In the following sections, each class of attributes (e.g., artifact number, site or locality, and level) is described and illustrated in those cases where written description is inadequate. The attributes listed below do not represent an exhaustive compendium of descriptive elements composing Dorset art, but a number of variables whose interrelations are valuable for testing the hypotheses of regional variation, temporal change, and function. Tables indicating the frequencies of these attributes within the sample make up Appendix A.

Artifact Number

Each of the artifacts included in the sample arbitrarily received a number between 1 and 252 for the above reasons of identification (two artifacts were removed from the sample after they were assigned a number, therefore only 250 artifacts form the sample).

Site or Locality

Thirteen sites and localities are represented by the artifacts used in the present study. In cases where artifacts were recovered by non-archaeological specialists or laymen and specific provenience was lacking save for the general vicinity in which the object was found, a locality name is used (*viz.*, Coats and Mansel Islands, Lake Harbour, Button Point, Andrew Gordon Bay, Clyde Inlet, and Iglulik). Artifacts recovered through careful excavation with adequate control of provenience are referred to by the site name (*viz.*, Alarnerk, Birket, Hall Beach, Rowley, Kaersut, Jens Munk, and Tyara), beach terrace and specific find unit in which the specimen was located. Table I in Appendix A summarizes the number and percentage of the total number of artifacts in the sample from each site or locality.

Level

Where intrasite provenience of an artifact is known, its approximate elevation above mean sea level in meters is indicated. This record is important in the analysis of change in stylistic elements and motifs through time, as levels, or beach terraces as they are commonly referred to, represent specific periods in time. Isostatic rebound since the retreat of Wisconsin glaciers in parts of northern Canada has proceeded at a known and steady rate in certain local areas for at least the past several millenia and has created a succession of raised beach terraces on which the remains of Eskimoid cultures are found. Radiocarbon dates have confirmed the contemporaneity of many beach terraces with their associated archaeological remains, revealing a picture of a shore-dwelling people whose extinct society may be dated with reasonable accuracy using a measurement of elevation above present sea level. Although this criterion for dating may not be used on a pan-arctic basis without adjustments for differential rates of isostatic rebound in different regions, most of the sites used for comparison here (*viz.*, the Iglulik area) are situated close enough together to rule out significant differences in rates of rebound. For obvious reasons, localities where the height above sea level was not recorded by the original investigators, an accurate date cannot at present be assigned. Table II in Appendix A indicates that over half of the sample was collected on sites where level was not recorded.

Find Unit

The cultural feature within which a particular artifact was found is recorded as one of four alternatives: the floor of a house, midden, associated with a burial, or unknown (missing data). Table III in Appendix A shows that 57.6 percent of the artifacts in the sample came from an unknown provenience, while the remainder in order of decreasing number were from house, midden, and burial proveniences.

Material

Over half of the artifacts were manufactured of ivory while antler, bone, wood, animal canines, steatite, and shell make up other materials in order of descending frequency (Table IV, Appendix A). Ivory and bone were both used mainly for the production of small two dimensional or carved-in-the-round artifacts, where antler was frequently used as the material out of which small boxes or cylindrical tubes were fashioned. Driftwood was probably used quite extensively as a medium for carving, but it survives only in the northernmost sites where permafrost aids in its preservation. Steatite and shell appear to have been used to make only a few ornaments, while canine teeth from seal and other animals were occasionally perforated, incised with a few simple linear elements, and used presumably as pendants.

Conventionalism

The most difficult category to objectively describe, "conventionalism" refers to the degrees of abstraction or departure from realistic portrayal of an object (e.g., seal, walrus, or other animal or inanimate object in the environment of the Dorset culture). From excavations in the Iglulik district, Jørgen Meldgaard has suggested that there is a trend from representation toward abstraction in Dorset art through time (Meldgaard, quoted in Swinton 1967: 47). Part of the objective of the present study is to test Meldgaard's suggestion with the data at hand. Subdivisions of conventionalism in the present study include basically three qualities: realistic, abstract, and unknown in cases where decision to label the artifact with one or the other term is not possible to make on the part of this investigator. Admittedly, the definition of conventionalism itself raises a series of questions about the validity of classification on the part of the investigator, as the cognitive sphere of the Dorset people is virtually unknown. The rationale used here in the implementation of categories of "realistic" and "abstract" is that their definition is made in terms of modern Western cognition where no pretense of reconstructing prehistoric Dorset cognitive patterns is made.

Table V in Appendix A indicates that 38 percent of the artifacts studied could not be classified under either rubric of "realistic" or "abstract." Of the remaining 155 artifacts, 71 were classed as "abstract" while 84 were placed under the category of "realistic."

Representation

Dominant feature(s) of each artifact were used as the criteria for classification in this category. Objects generally represented either specific animate or inanimate things, although 31 (12.4 percent) of the artifacts used in the present analysis could not be classified. Inanimate objects include miniature representations of harpoon heads, decorated full-size harpoon heads, paddle-shaped objects, tubes, thin discs, a lance blade, pieces of containers made of antler sections, decorated teeth, and a shell pendant. Animate objects ranged from representations of humans, land and sea mammals, and birds. Table VI (Appendix A) indicates the frequency of distribution of these forms within the sample. Of animate representations, bear, seal, and human forms appear to be the most common, while inanimate objects such as antler container fragments, thin discs, paddle-shaped objects, and tubes appear to be the most numerous of this second category.

Incising and Perforations

Incising and perforation of artifacts included in the present sample, presumably executed by burin, constitute the major form of variability in Dorset art as a whole and amount to the main focus of this study. In the following sections, a series of alternative and sometimes correlative means of representing a particular feature (e.g., an anatomical feature such as a vertebral column) are listed. For each artifact in the sample, the corresponding attributes were recorded. The labels given the attributes remain as only a convenience for the purposes of the present analysis and must not be considered to be the final interpretation of their actual meaning *vis-a-vis* the prehistoric Dorset culture. Until these interpretations are tested with some viable independent data, they must remain analytic constructs.

Attachment perforations. Perforations apparently used for attaching an artifact to clothing or other materials occur on less than half of the artifacts in the sample (Table VII, Appendix A). Most commonly perforated were small representations of seals, walrus tusks, and other animal representations. A large portion of the sample of perforated objects were antler section containers, the sections of which were presumably joined by sinew.

<u>Other perforations</u>. Although originally designed to be an open-ended "other" category, only one additional kind of perforation is included under this rubric. Slot perforations that cover the surface of an artifact are indicated as either present or absent on artifacts included in the present sample. This type of perforation is indicated on 17 of 250 artifacts (Table VIII, Appendix A).

<u>Incised slots</u>. This category includes three variants: a single ventral slot without insert (piece of wood or bone inserted into the slot); a single ventral slot with insert; and double ventral slots without inserts. The incised slots occurring on the ventral side of some carved animal forms (7 out of a total of 250 artifacts, Table IX, Appendix A) have been interpreted by Swinton (1967: 43) as symbolic means by which the flesh may be divested for purposes of shamanic acts. Swinton's sample for figural representation shows high frequency of incisions in bear and falcon forms although not for other representations. The inserts may well have been symbolic extensions of the idea of containing evil spirits within

the object or possibly a means of ritualized killing of the animal represented by the carving. Some of the specimens studied by Swinton (1967: 43) were stained with red hematite around the area of the slot, although none of the artifacts used in the present study were stained.

Spine representations. Several different styles of incising in the medial position of the back of carved animal forms have been traditionally identified as representing a vertebral column or spine. Within the present sample, five distinct ways in which the spine is portrayed were defined: a single incised medial line on the back (sometimes occurring on the ventral surface); a double medial line on the back; a double medial line on the back with parallel bars intersecting the lines; a double medial line with enclosed chevrons; and a single medial line on the side of the carving. Figure 4 illustrates the manner in which these representations differ from one another. Table X (Appendix A) shows that only 30 of 250 artifacts were animal representations on which spine motifs or elements were present, although longitudinal lines analogous to some of those indicated in Figure 4 occurred on other kinds of artifacts (cf., Table XV, Appendix A).

Rib representations. Usually, but not always, found in conjunction with spine representations are multiple lines that form a double parallel-oblique pattern on the dorsal side of animal figures. These lines were classed as the same form, but differing in location on the back or dorsal surface of the animal representation. Rib representations were divided into three locations: upper back, mid-back, and lower back, although on some figures these patterns occur in several combinations (e.g., a bear figure with rib representation on both upper and mid-back, but absent on lower back). Figure 5 indicates a typical means of representing ribs, in this case illustrated in conjunction with a single medial line representing the spine or backbone (also see Table XI, Appendix A for frequencies of occurrence of each kind of rib representation).

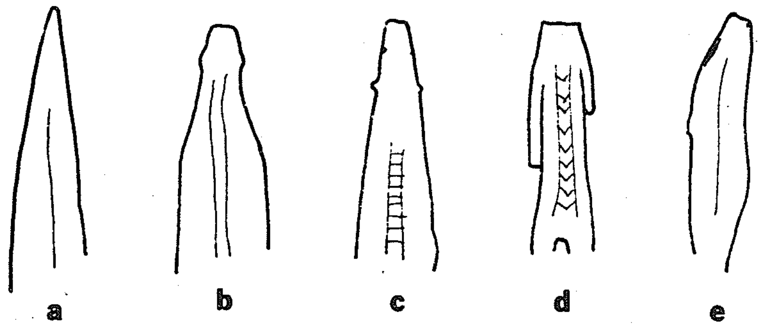


FIGURE 4

SPINE REPRESENTATIONS: *A*, SINGLE MEDIAL LINE ON BACK; *B*, DOUBLE MEDIAL LINE ON BACK; *C*, DOUBLE MEDIAL LINE WITH PARALLEL BARS ON BACK; *D*, DOUBLE MEDIAL LINE WITH ENCLOSED CHEVRONS ON BACK; *E*, SINGLE MEDIAL LINE ON SIDE.

Rib or peripheral nerve representations. In 31 cases (Table XII, Appendix A), short, parallel lines intersecting a longitudinal line were recorded on animal forms. These short incised lines may represent either alternate ways of indicating ribs, or perhaps illustrations of peripheral nerves in the animal symbol. The variations recorded are illustrated in Figure 6, including short parallel lines on the upper, mid-, lower, or entire back of the animal figure. In a few cases, similar short lines were found intersecting a longitudinal line on the side of an animal form.

Limb representations. This class of incised attributes consists of a number of elements that are found on the limbs of animal forms included in the sample. The class is subdivided into "joint markings" or incised at or near the position of bone articulations in the

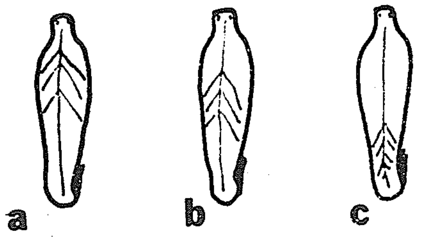


FIGURE 5

RIB REPRESENTATION ILLUSTRATED WITH A SINGLE MEDIAL LINE INDICATING THE SPINE: *A*, UPPER BACK POSITION; *B*, MID-BACK POSITION; *C*, LOWER BACK POSITION.

animal represented (Figure 7 *A*, *B*), incised lines or rings around appendages at random locations (Figure 7 *C*), longitudinal lines (Figure 7 *D*), and sets of parallel-oblique lines radiating from a medial position on the limb shaft (Figure 7 *E*). Table XIII, Appendix A, tabulates the frequency of occurrence of each of these classes of limb representations.

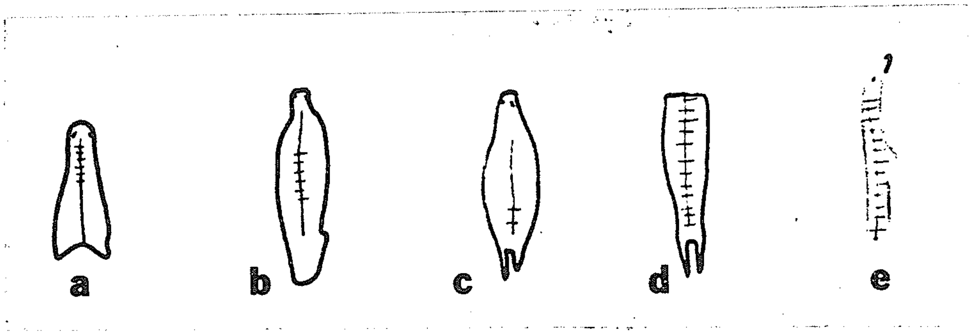


FIGURE 6

RIB OR PERIPHERAL NERVE REPRESENTATIONS: *A*, UPPER BACK POSITION; *B*, MID-BACK POSITION; *C*, LOWER BACK POSITION; *D*, ENTIRE BACK; *E*, SIDE POSITION.

<u>Neck and head incised elements</u>. This category is composed of 10 elements, each of which consists of one or several incised lines or gouged pits (as in the case of nostrils that are gouged from an ivory representation of a face) that occur on the neck or head of carved representations of animals and/or humans. Sixteen carvings indicated multiple rings around the neck (Figure 8 *A*), while three had crosses or crossed lines positioned behind

ears (Figure 8 *B*), four were found to have "crosses" or crossed lines on top of the head (Figure 8 *C*), four had a "cross" eminating from between the eyes but in most cases extending across the entire face (Figure 8 *D*), eight indicated a line or slot in a medial position between the eyes (Figure 8 *E*), eight had nostrils indicated on the face (Figure 8 *F*), three had mouths that were represented by a latitudinous line across the lower part of the face intersected by short lines intersecting it (Figure 8 *G*), eleven had mouths that were represented by a single line without the shorter, intersecting lines (Figure 8 *H*),

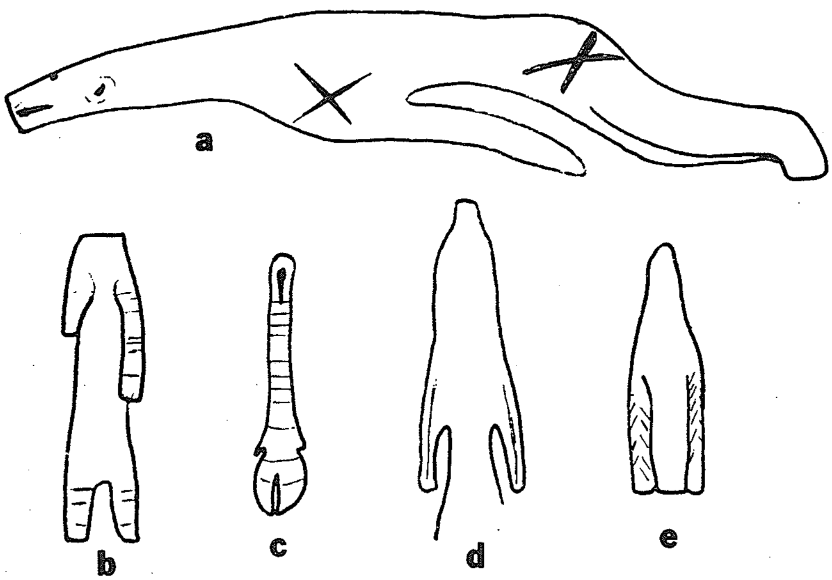


FIGURE 7

LIMB REPRESENTATIONS: *A*, "CROSSES" AT JOINTS; *B*, RINGS OR LINES AROUND APPENDAGES LOCATED AT OR NEAR JOINTS; *C*, RINGS OR LINES AROUND APPENDAGE(S) WITH NO SPECIFIC LOCATION; *D*, LINES RUNNING LONGITUDINALLY ON APPENDAGES; *E*, PARALLEL-OBLIQUE LINES RADIATING FROM A MEDIAL POSITION ON THE LIMB SHAFT.

four had latitudinous lines covering the entire face (Figure 8 *I*), and finally, one had latitudinal lines positioned below the mouth only (Figure 8 *J*). The neck and head incised elements indicated here represent a number of ways of representing facial, head, and neck features that may be related to parts of the skeleton, facial tatoos (in the case of human representations), possibly locations of inflictions resulting from a curing ceremony, or possibly

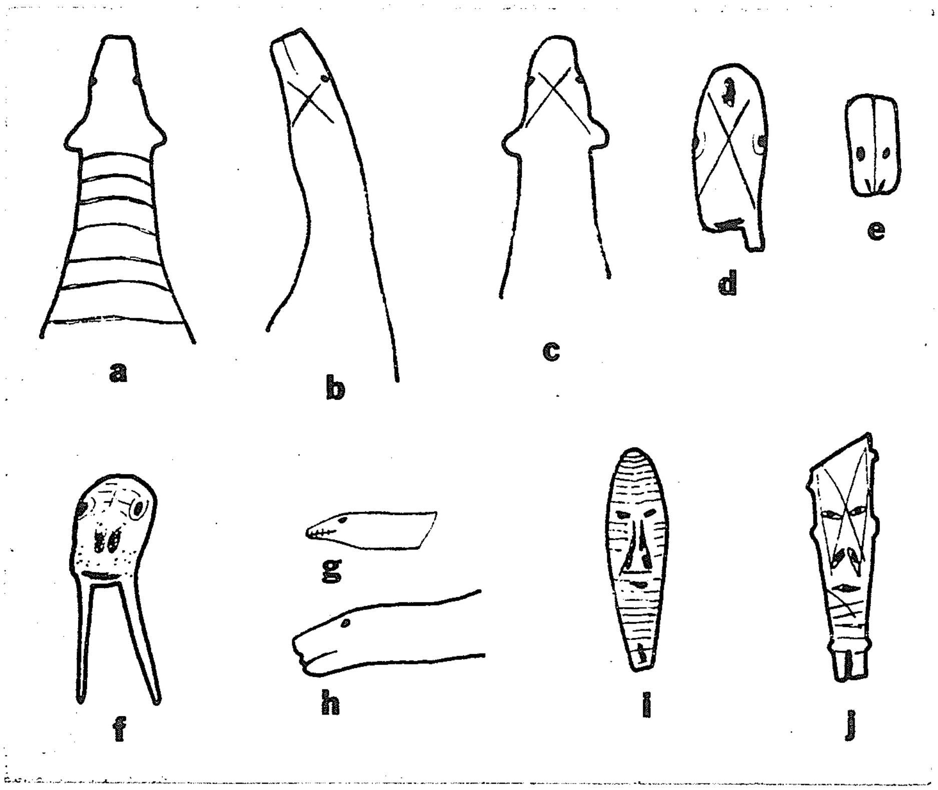


FIGURE 8

NECK AND HEAD INCISED ELEMENTS: *A*, MULTIPLE RINGS AROUND NECK; *B*, "CROSSES" BEHIND EARS; *C*, CROSS ON TOP OF HEAD; *D*, "CROSS" BETWEEN EYES; *E*, LINE OR SLOT MEDIAL BETWEEN EYES; *F*, NOSTRILS; *G*, MOUTH WITH INTERSECTING LINES; *H*, MOUTH WITHOUT INTERSECTING LINES; *I*, LINES COVERING FACE; *J*, LINES BELOW MOUTH ONLY.

related to other kinds of magical endeavor (Table XIV, Appendix A).

Other incised elements. Several disparate elements that could not be subsumed under any of the aforementioned categories are here lumped together in the form of an "other" category (Table XV, Appendix A). The elements included under this rubric are in most cases analogues to skeletal or other features that have been found incised on animal forms, but that occur on artifacts that do not appear to represent animals, at least in outward form. Represented in this category are: lines indicating the distinctive features of a human face (Figure 9 *A*),

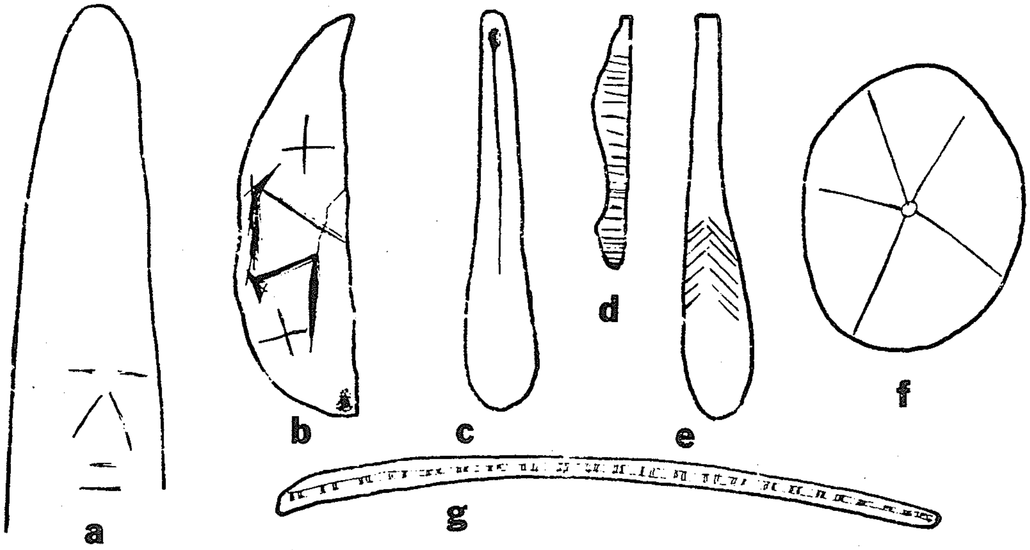


FIGURE 9

OTHER INCISED ELEMENTS: *A*, HUMAN FACE; *B*, CROSSES; *C*, LONGITUDINAL LINES; *D*, PARALLEL LINES; *E*, DIAGONAL LINE(S); *F*, RADIATING LINES; *G*, LONGITUDINAL LINES, INTERSECTED BY SHORTER LINES.

"crosses" that may be analogues to "joint marks" and other similar features found on some animal forms (Figure 9 *B*), longitudinal line(s) that may or may not be analogues to one form of long bone or vertebral representation (Figure 9 *C*), parallel lines that are perpendicular to the long axis of the artifact (Figure 9 *D*), line(s) that are positioned diagonally to the long axis of the artifact (Figure 9 *E*), lines that radiate from a central point (Figure 9 *F*), and line(s) with multiple short intersecting lines that may be analogous to yet another form of vertebral or spine representation (Figure 9 *G*).

II. INTERRELATIONS OF ATTRIBUTES

The interrelations of the attributes described in this chapter constitute the basis for delimiting patterns and change in formal variation. Before continuing to an analysis of these interrelations, it is important to reiterate a word of caution with regard to the validity of statistical associations. Contingency and chi-square tests are aimed at showing whether or not an association between two or more variables is likely to exist. Although the chi-square value is an indicator that there may be an association between two or more variables, it cannot be interpreted as a positive indication that the variables are indeed interrelated. The next step, after having shown that there is a statistical relationship between two or more variables, is to demonstrate the nature of the association. That is, if two variables are interrelated, it must be shown that there is a basis for their relationship that is meaningful in an archaeological context. For purposes of the present study, interrelationships due to changes in the ways people used artifacts, for instance, must be shown through the use of independent data if statements about culture change are to be made. As it will be seen, this is more often than not difficult to ascertain, as much evidence independent of the artifacts used in this study was not obtainable. The following two chapters focus on this problem and answer some of the questions posed in the hypotheses that have been formulated.

CHAPTER IV

PATTERNS OF FORMAL VARIATION

For many years, Dorset art has appeared to be relatively uniform in style; stylistic elements that comprise the art have been noted on artifacts from different parts of the Canadian Arctic and Greenland. Yet, recent archaeological work in Newfoundland indicates that there may indeed be several Dorset art styles, instead of a single style. How many styles are represented in the Dorset culture, what are their defining characteristics, and what are they able to reveal about intergroup or interregional relations? These questions form the basis for the first hypothesis: Dorset art has regional styles; the subject matter is generally the same, but the precise manner of representation differs from one region to the next. The second hypothesis, that temporal changes within certain areas do not necessarily reflect a "realistic to abstract" trend but may show other kinds of changes, presents another aspect of variation in Dorset art. The question of actual uses to which pieces of Dorset art were placed forms the basis for the third hypothesis: Dorset carvings were not manufactured and used predominantly by shamans, but saw general use in a variety of activities. Each of these three hypotheses are interrelated in the respect that the ultimate aim is to delimit the functions of art within Dorset societies and to define how much difference in the manner of representation between settlements can be said to reflect differences in the societies that inhabited these settlements.

The substantive data that form the basis for proposition tests outlined in the following sections are found in Appendix B. Tables in Appendix B show the frequencies of two or more attributes that are crosstabulated with statistical test results below each table.

I. REGIONAL STYLES

The Dorset subtradition has traditionally been thought as maintaining a homogeneous art style. Henry Collins has described Dorset art as having "incised ornamentation consist(ing) mainly of a simple arrangement of straight and oblique lines, X's, and chevrons" (1961: 25). Collins continued by suggesting that many of the elements comprising the "skeletal motif," the lines, X's, and chevrons, were an *idee fixe*. That is, these elements appear repeatedly on artifacts representing both animate and inanimate objects found in widely separated archaeological contexts from the extreme western extent of Dorset culture to its eastern margin in Greenland. However, the appearance of uniformity in stylistic elements across the eastern arctic loses its homogeneous character in

Newfoundland. Excavations at Port aux Choix-2, a Dorset habitation site occupied intermittently between about A.D. 162 and 589, have revealed art work that does not reflect stylistic elements characteristic of many pieces recovered from more northerly sites (Harp 1969: 1, 24). In his Newfoundland work, Harp found that the skeletal motif is either poorly developed or largely absent and most of the incised decoration appears to be decorative without necessarily being representative of the carved animal's anatomy (1969: 24). The distinction of at least two regional styles by Harp, one centering in Newfoundland and the other widespread across most of the eastern arctic, leads to a question of how many other regional styles may be defined if subtle differences in attributes are studied in art work from arctic areas other than Newfoundland? And, to what extent may these styles reflect differences between societies that once inhabited Dorset settlements?

In an attempt to answer these questions, incised elements occurring on Dorset artifacts were crosstabulated with the sites or localities from which the artifacts were recovered. The contingency table and formulation of chi-square used in crosstabulation were designed to determine the existence of statistical relationships between certain sites and incised elements.

Testing for Uniformity in Representation

The actual operation of the tables and statistics will become clear after a few examples, but first the assumption that Dorset art maintains a uniformity in representation among sites and localities must be tested. This assumption reflects the idea that there is some homogeneity in Dorset art and that the similarity in carved shapes between different areas of the Canadian Arctic reflects a similar cultural subtradition--the Dorset culture.

The initial crosstabulation of representation by site resulted in a table with a large number of cells with zero frequency (Table I, Appendix B). Because the value of chi-square can be influenced to a great degree by empty cells, no statistical measure of association was performed, but the table was reduced so that sites containing few artifacts (under ten) were omitted.

A second table was constructed (Table II, Appendix B) that limited the number of sites in a crosstabulation of site by representation. This table also yielded a large number of cells with zero frequency, so a third table was made that retained all of the sites, but collapsed categories of representation into six values: human forms, sea mammals, land mammals, birds, decorated implements, and miniature implements (Table III, Appendix B). Again, there were a number of cells with zero frequency. But, the combination of these two tables (Tables II and III, Appendix B) where first the number of sites was reduced and then the values of representation were collapsed, respectively, presented the data that were needed to construct a series of tables where values were sequentially collapsed (Tables IV through VIII, Appendix B). Tables IV and V crosstabulated areas or regions as defined by clusters of sites by collapsed categories of representation. The areas included in Table IV are: Hudson Strait, East Baffin, and Hudson Bay. Zeros occurred in cells where some representation categories were crosstabulated by either the Hudson Strait or East Baffin value, so the two region categories were collapsed into a single "other" category in Table V. The same sequence of collapsing sites was followed in Tables VI and VII but with the value "decorated implements" omitted as Hudson Bay sites showed a striking difference in frequency of decorated implements from other sites--a difference probably due solely to the concentration of archaeological excavations in this as opposed to other areas in the eastern arctic. Finally, in Table VIII, artifact representation was collapsed into two categories: "non-sea mammals" and "sea mammals." All site categories were also collapsed into two regions: Iglulik, containing Alarnerk, Birket, Hall Beach, Rowley, Kaersut, Jens Munk, and Iglulik; and Other, including Coats and Mansel Islands, Lake Harbour, Button Point, Andrew Gordon Bay, Clyde Inlet, and Tyara sites. This table yielded a chi-square value of 5.75 with one degree of freedom. Although one cell had a low frequency compared to the other three, the significance value of .0165 indicates that there are no statistically significant differences in type of representation between the "regions." The Phi value of .17973 reflects the weak strength of any statistical associations between "regions" and kind of representation.

The interpretation of the above statistics can have several different meanings for the hypothesis that sites or localities are highly correlated on the basis of representation or form of artifacts found there. The general conclusion is that there does not appear to be uniformity between sites based on categories of representation. The main reason for this apparent lack of uniformity could be an inadequate sample size. Many of the representation categories had only a few examples from only a few sites, while other categories had many examples from only one or two sites. Sites that contained many examples of one kind of representation are frequently those that had seen intensive surface collection (e.g., the Rousseliere collection from the Iglulik area) or extensive excavation (e.g., sites in the Iglulik area that have been excavated by Jørgen Meldgaard). The sample size from each site in the present study varies with the sampling strategy used and thus may obscure the actual pattern of distribution.

Other variables that may be affecting the distribution of artifacts presented in Appendix B (Tables I-VIII) include a wide range of time periods represented by the artifacts and possibly functional specificity of sites from which the artifacts were gathered. In the former situation, relative lack of chronological control in the present sample prevents across the board segregation of artifacts on the basis of their absolute or relative age. In the latter case, not all of the sites from which artifacts have been gathered may be comparable on the basis of settlement type. Differences in the activities that may have been carried out between sites may reflect differences in the kinds of art work present. Any one of these variables are difficult to control in the present analysis, but should be carefully considered with the conclusions that will be presented later on.

Testing for Variation in Incised Elements

Failure of the data to totally support the inference that there is uniformity in frequencies of carved shapes between sites does not prompt a total rejection of the hypothesis that Dorset art outside of Newfoundland manifests regional styles. In fact, it would tend to support the idea of a diversity in carved representations between different sites if it were not for the weakness of such statistical associations.

To further test the hypothesis of regional diversity, a number of incised elements were crosstabulated by sites. The resulting tables (Tables IX through XXX, Appendix B) showed that while some elements had uniform distributions across the eastern arctic, others were site or region-specific.

The first set of tables in this series (Tables IX through XII, Appendix B) crosstabulated sites by spine representations. Table IX crosstabulated site by four spine representations: a single medial line, double medial line, double medial line with parallel bars, and a double medial line with enclosed chevrons. A large number of cells contained zero frequencies and so the resulting chi-square value is probably spurious. However, the table formed the basis from which some conclusions could be drawn.

A close inspection of Table IX shows that out of thirteen sites and localities, only Alarnerk, Lake Harbour, Button Point, and the Iglulik area appear to have a predominance of the single medial line element as a spine representation. The Tyara site and Iglulik area shared one example each of the double medial line, Alarnerk and the Iglulik area shared one example each of the double medial line with parallel bars and Alarnerk and Kaersut shared one each of the double medial line with enclosed chevrons.

Table IX also shows that there is some evidence to suggest that the single medial line as a spine representation is relatively widespread, while the double medial line with parallel bars and the double medial line with enclosed chevrons are restricted to sites in the general Iglulik region at least in the present sample. The spine representation consisting of a double medial line was found both in the Iglulik area and at the Tyara site, but again it represents a sample too small for any meaningful conclusions.

In order to crosstabulate sites with values of spine representation that would result in statistically meaningful relationships, three additional tables were constructed--each table representing fewer categories than the previous one as a result of collapsing values (Tables X through XII, Appendix B). The final outcome of collapsing values of both the site and spine variables is Table XII where sites within the Hudson Bay (value 21) and Hudson Strait and East Baffin areas (value 22) were crosstabulated with ornamented (or embellished) and plain spine representations. Crosstabulation of these four values indicates that with a chi-square value of 1.10 (rounded to the nearest one-hundredth) and one degree of freedom, the probability is .2953 that there is no relationship between the two sets of values. In other words, there is a possibility that there are no statistically significant differences between sites on the basis of the collapsed spine representation categories. The value of Phi indicates that any statistical associations between areas would be relatively weak. The Pearson's contingency coefficient of .29111 also indicates the weakness of any associations.

Since the logic of condensing and collapsing values of variables should be clear after the last few examples, I will abbreviate the description of statistical findings in the following crosstabulations of sites and artifact attributes. Where values of artifact attributes could not be meaningfully collapsed, site categories were collapsed into site clusters that represent geographic areas.

The collapsing of site categories in a crosstabulation of site by rib representation is a case in point. In Tables XIII through XV (Appendix B), successive collapsing of site categories resulted in a table (Table XV) with low cell frequencies, although the frequencies were not as low as found in the first table (Table XIII). Because of the low cell frequencies, the chi-square value of 1.41 may be spurious, but inspection of the table indicates that there probably is no relationship between the two sets of variables. That is, there do not appear to be significant differences between sites on the basis of rib representations.

A crosstabulation of site by rib or peripheral nerve representations (Table XVI, Appendix B) led to the construction of two additional tables (Tables XVII and XVIII, Appendix B) where both variables were successively collapsed. In Table XVI, the total number of artifacts having rib or peripheral nerve representations was too small for the number of cells to yield a statistically meaningful chi-square value. So, site categories were collapsed into two sites (Button Point and Tyara) and one region (Iglulik area) while the incised motifs were collapsed into full or partial rib (peripheral nerve) representations (Table XVII). Low cell frequencies prompted the construction of a third table (Table XVIII) where the Fisher's Exact Test was used to compute a value of .39 that indicated a moderate chance of differences in rib or peripheral nerve representations between sites in the Hudson Bay area and those in other areas of the eastern arctic. However, the Phi value of .17118 indicates that the strength of any statistical associations is weak.

In the crosstabulation of site by limb representation (Table XIX, Appendix B), the total number of artifacts used in the table was too small for the number of cells to gain reliable statistics. Again, the table was collapsed reducing the number of site categories from seven to five (Table XX, Appendix B). Since the resulting cell frequencies were still too small, Table XXI (Appendix B) was constructed by crosstabulating Hudson Bay sites and other sites with those artifacts that showed crosses at joints and other types of limb representations (the latter category was a combination of all remaining limb representations). This last table yielded a value for the Fisher's Exact Test of .27 indicating a probability of difference between geographic regions in the proportions of limb representation type found on artifacts. The strength of this association is moderately high as indicated by a Phi value of .44320.

A series of five tables (Tables XXII through XXVI, Appendix B) that crosstabulate site or region by neck and head motifs indicate that there are statistically significant differences between regions with respect to certain kinds of incised decoration of the neck and head of carved animal forms. The last of a series of successively collapsed tables (Table XXVI, Appendix B) shows that there are differences between sites in Hudson Bay and those in other areas in the frequency of incised face features, although the existence of crosses on the neck and head appear to be widespread throughout the eastern arctic. The latter feature is based only on a few recorded occurrences and must not be regarded as definitive at this time.

The last set of tables used to delimit regional stylistic patterns (Tables XXVII through XXX, Appendix B) represents four successive attempts to arrange a miscellaneous category of "other incised motifs" so that some patterns of regional variation may be illustrated. The first table (Table XXVII) is a gross crosstabulation of all of the values involved in a site by "other motifs" matrix. The remaining three tables represent successive attempts to collapse the site variable while retaining all but two of the original incised motifs. Although three of the ten cells in the last table (Table XXX) had zero frequencies, there is a striking difference in the proportions of incised motifs between regions. This conclusion by inspection of the table is corroborated to a certain extent by a chi-square value of 6.56 and a significance level of .1609 indicating at least some chance that there are differences between the regions.

Although many of the above crosstabulations have shown that there are some differences between regions with respect to incised decoration of artifacts, there are also some similarities. With respect to spine representations, the single medial line was found to be widespread, while the other values for spine representation were restricted either to a specific geographic region or to specific sites. Rib representations are distributed in a relatively uniform manner throughout the eastern arctic, although the distribution of the mid-back value is more uniformly distributed than the remaining values. The mid-back value is also the most common of the three values. Rib or peripheral nerve representations showed a limited distribution between two sites and two areas: Alarnerk site, Button Point, Tyara site, and Iglulik. Most of the rib or peripheral nerve representations are reasonably widespread across the eastern arctic with the exception of short parallel lines on the mid-back and short parallel lines on the entire back, where there is only one example of the latter from Alarnerk. With respect to limb representations, crosses at or near joints were recorded from only one artifact from the Tyara site, parallel rings at or near joints were recorded only for specific sites or areas in the Iglulik region, rings with no specific location on limbs were recorded on artifacts only from the Iglulik area, and lines running down appendages were found on artifacts from sites and areas scattered across the eastern arctic. The variable of neck and head motifs contained values such as facial characteristics (*viz.*, mouth and nostrils) that are limited to artifacts found within the Iglulik region and absent or at least uncommon in other areas. Many of the other neck and head motifs appear to occur throughout the areas studied. From crosstabulations of site by "other incised motifs" it was found that the human face motif, lines diagonal to the long axis of an artifact, lines radiating from a point as found on section tube bottoms, and longitudinal lines with crossarms are found only on artifacts from the Iglulik region. The remaining motifs such as crosses, plain longitudinal lines, and short parallel lines that are perpendicular to the long axis of an artifact, are found on pieces from sites scattered throughout the sample area.

The Nature of Regional Styles

The hypothesis about regional styles that was set forth earlier in the chapter *Methods and Techniques* presented Dorset art as part of a single cultural subtradition, although embodying some variation between geographic locations. In an attempt to test the hypothesis, the representation of artifacts were crosstabulated by sites to show that there was a basic relationship between sites on the basis of artifact forms. However, statistical tests of the data in the present sample tend to show that in fact there is a good deal of variation between sites with regard to the kinds of artifacts found. Thus, in spite of the fact that there are a few carved forms that recur in sites widely separated geographically, there does not appear to be a great deal of uniformity in the frequencies of artifacts. Much of this disparity between the results of statistical tests and ideas of researchers as William E. Taylor (1967: 10) who feel that there is geographical continuity in carved forms may well be the result of disparate sampling techniques and simply variation in the amount of data that has been recovered from individual sites in the eastern arctic.

Testing for variation of incised elements and motifs did reveal both some geographical continuity and some regional or site specificity in surficial embellishments. Table III summarizes the distribution patterns of incised designs on the sample of Dorset artifacts under study, dividing the elements and motifs into two categories on the basis of the crosstabulations: those that form part of a localized "tradition;" and those that form part of a non-localized "tradition" that spans much of the eastern arctic. Most all of the localized elements and motifs can be attributed to either specific sites within the Iglulik area or the Iglulik area encompassed by the collections of Rousseliere. The exceptions are rib or peripheral nerve representations (short parallel lines on mid-back) from an example found at Button Point, and limb representations (crosses at joints) from an example found at the Tyara site. Again, because of the smallness of the present sample, the associations of certain incised elements and motifs with particular regions or sites should be accepted only with the greatest of caution.

TABLE III. DISTRIBUTION PATTERNS OF INCISED ELEMENTS FROM DORSET ARTIFACTS.

Variable: Incised Elements	Localized	Non-localized
Spine Representations:		
single incised medial line		X
double medial line		X
double medial line with parallel bars	X	
double medial line with enclosed chevrons	X	
Rib Representations:		
parallel-oblique lines on upper back		X
parallel-oblique lines on mid-back		X
parallel-oblique lines on lower back		X
Rib or Peripheral Nerve Representations:		
short parallel lines on upper back		X
short parallel lines on mid-back	X	
short parallel lines on lower back		X
short parallel lines on entire back	X	
short parallel lines on side		X
Limb Representations:		
crosses at joints	X	
rings around appendages at or near joints	X	
rings around appendages at other locations	X	
longitudinal lines on appendages		X
parallel-oblique lines on limb shaft	no data	

TABLE III (cont.)

Variable: Incised Elements	Localized	Non-localized
Neck and Head Motifs:		
multiple rings around neck		X
crosses behind or in front of ears		X
cross on top of head		X
cross between eyes and extending over face		X
line or slot medial between eyes	no data	
nostrils	X	
line with intersecting shorter lines indicating mouth	X	
single line indicating mouth	X	
latitudinous lines covering face		X
latitudinous lines below mouth only		X
Other Incised Motifs:		
Human face	X	
crosses		X
longitudinal line(s)		X
short parallel lines		X
line(s) diagonal to long axis of artifact	X	
lines radiating from a central point	X	
longitudinal lines with crossarms	X	

II. CHANGES THROUGH TIME

Although the statistical tests that crosstabulated site by representation illustrated some regional patterning of carved shapes and incised decoration, lack of chronological control for artifacts recovered from all sites prevented distinction of regional variation within specific periods of the Dorset subtradition. Yet, a significant sample of the artifacts used in the present study are from sites in the Iglulik area that have been recovered with detailed provenience information. From this information, at least a single region can be analyzed to determine if there are indeed trends in the change of art style through time.

The hypothesis presented earlier, that temporal changes within certain areas of the eastern arctic show that the dominant trend is not necessarily from "realistic" to "abstract" portrayal of subject matter, but that other patterns may be just as strong or stronger, is based on statements made by Jørgen Meldgaard about the nature of change in the Iglulik district (1960: 15-16). George Swinton (1967: 47) has suggested that Meldgaard's argument is not totally convincing and that ideas as well as evidence for a trend of realism to abstraction need to be re-examined.

In the following sections, contingency and chi-square operations are introduced to the problem of temporal change. First, data from five sites in the Iglulik district (Alarnerk, Birket, Rowley, Kaersut, and Jens Munk) were combined to form tables where beach ridge provenience (meters above sea level) is crosstabulated by conventionalism (realistic and abstract). Once patterns of variation were identified, some change between successive sets of beach ridges could be seen. And finally, contingency tables constructed for variables from each site were examined to determine the nature of the contribution from each site to the tables in which combined frequencies are used. Although these latter tables are not included in the present work, the results are summarized below.

Testing for the Existence of Temporal Variation

A total of seventy-one artifacts from known proveniences within sites of the Iglulik district were crosstabulated by conventionalism. In the resulting table (Table XXXI, Appendix B), categories of conventionalism including two- and three-dimensional realistic, and two- and three-dimensional abstract were combined to make two classes of conventionalism: realistic and abstract. The total number of artifacts from each class are nearly equal; realistic representations totalled thirty-nine, while abstract representations numbered thirty-two.

A close inspection of the table (Table XXXI, Appendix B) indicates that there are fluctuations in the frequency of both realistically and abstractly portrayed carvings between different beach ridges or levels. From the twenty-two meter level, the oldest level for which information on conventionalism was recorded, it appears that realistically portrayed carvings waivered slightly in frequency until a time represented by the fifteen meter level when the frequency reached a high of eleven specimens. From the fifteen meter level to more recent times represented by the eight meter level, the frequency also saw slight fluctuations although the average frequency was slightly higher than during periods represented by levels previous to the fifteen meter level. Ignoring possible bias in the original excavation sample for the moment, it appears that there was a general increase in the frequency of carved forms through time that reflected a "realistic" or "representational" style. A similar trend is seen in the distribution of abstraction in art work. There are slight fluctuations in the frequency of abstract forms until the fifteen meter level, beyond which there are also slight fluctuations but between larger frequencies. Changes in frequency through time of realistic vs. abstract forms appear outwardly to be similar.

This assertion is corroborated by the statistics from a second table (Table XXXII, Appendix B). In Table XXXII, levels were collapsed into four categories, each representing several beach terraces. The resulting chi-square value of 1.52 yielded a significance level of .6766 that indicates little possibility of a statistically significant trend through time in differences between realistic and abstract manners of portraying life forms.

The Nature of Temporal Variation

The present sample, albeit small, appears to indicate that changes in conventionalism through time are not definitely from realistic to abstract. Rather, the trend is that of covariation that can be accurately evaluated only with a larger sample size. Much of the contribution of specimens used in this analysis has been from the Alarnerk site. However, in future work in the Iglulik district, it would be helpful to have samples from other sites that are of equal or nearly equal size to offset patterns that may be unique to one site.

Logically, the next question to ask is: what has caused the distribution of realistic and abstract forms used in the present study so that its significance may be evaluated in the light of discussions by Meldgaard (1960: 15-16) and Swinton (1967: 47)? The nature of the sample certainly has a bearing on this subject, which at this stage is difficult to evaluate because much of the information has not been published. But, it is quite likely that the distribution of artifacts was influenced by relative amounts of excavation carried out within each level or beach terrace. If, however, the area, types of features, and recovery techniques were comparable, the frequency distribution could have been affected by several factors. First, it is quite possible that there were some changes affecting the quantity of art work produced between successive occupations of each site, assuming the same or similar groups returned to the same site. Emphasis on the quantities of art produced or its distribution would also have been affected by the possibility of unrelated groups successively inhabiting the same site. Resolution of these problems may only come after extensive work in attempting to reconstruct prehistoric social and cultural patterns and success in differentiating social groups on both a temporal and spatial basis.

III. FUNCTIONS OF DORSET ART

Some reconstruction of prehistoric social patterns has been attempted that has drawn art work of the Dorset subtradition into a hypothetical pattern of social interaction. In a brief article on prehistoric Dorset art, George Swinton (1967: 39) has presented what remains as the most extensive reconstruction attempted. In his words, ". . . I am reasonably convinced that most, if not all, Dorset art is not only magical, but probably highly specialized (and 'professional') shaman's art" (1967: 39). Swinton continues by outlining parallels between carved shapes, motifs, and elements of Dorset art and ethnographic literature of Eskimo groups in the eastern arctic as well as information on shamanic practises among groups in Alaska and Siberia. The parallels that are drawn have formalized in one body of literature many ideas that are worth following up if we wish to better understand the "content" of art among social groups encompassed within the archaeologically-defined Dorset subtradition. But, these parallels in no way provide a proof that in fact a shamanic cult existed or that most of Dorset art was "shaman's art."

In order to show that there may be some concrete basis for the assumption that Dorset art is "shaman's art," it is important to use as much independent data as possible in the analysis. For instance, similarity in form only is not sufficient indication that similar artifacts had similar functions. But, if enough provenience information is available, it may be possible to show that because two similar artifacts are consistently found in a particular context or that their occurrence covaries in a number of contexts, that their functions may be related. From interpretation of these contexts, it may be possible to investigate the probable function(s) of the two artifacts.

It is this kind of procedure that will be used with the present sample of Dorset art work to reveal information additional to that which has been suggested by Swinton

(1967: 39). The question remains: in what contexts would we expect to find objects of Dorset art, how do they covary *vis-a-vis* contexts, and what are the meanings of such associations?

Testing for Associations of Dorset Art

Using the ethnographic literature as a source for analogies that can be tested with archaeological data, we find that amulets or fetishes are often thought to symbolize a supernatural alliance between the wearer and the power for which they stand (Birket-Smith 1935: 169). An amulet or fetish in this case refers to small carved forms of animals or occasionally an abstract-appearing artifact that at one time had significance to its owner. If we may make the analogy between artifacts that were used ethnohistorically as amulets and similar forms that occur in prehistoric Dorset assemblages, it may be possible to compare the contexts in which these items were deposited by individuals in ethnohistoric times with the contexts in which similar artifacts appear in the archaeological record to strengthen the interpretation of their functions.

According to Birket-Smith (1935: 169), mere possession of an amulet in many Eskimo groups did not constitute the mystical alliance but symbolized it. As such, the amulet may be lost and still its owner would retain the power that at one time was symbolized by the amulet. However, there are exceptions to this idea as expressed by Knud Rasmussen's notes on East Greenland Eskimos. According to the notes, East Greenlanders generally felt that possession of the amulet made them invulnerable to certain dangers and that loss of such articles was carefully guarded against (Ostermann 1938: 144).

Within certain historic Eskimo sites, then, we could probably expect to find small carved amulets scattered in midden areas and possibly inside dwellings where they may have been lost. However, among other sites of the same time period, we may find few amulets lost in this manner because of the seriousness involved in any loss. Yet, amulets may also be found in burials, at least among those groups that practised disposal of the dead where remains occur archaeologically. Birket-Smith (1935: 159) notes that it is common practise among Eskimos in general to place implements and other belongings in a dead person's grave in order to aid the dead one in his new existence. Although reference to amulets that one kept in life being placed in the grave after his death is conspicuously absent from ethnographic literature, it is quite likely that belongings of this sort would be useful in the next "life" and would be logical accompaniments.

From this brief background, we can see that in historic Eskimo groups, art in the form of carved amulets was not a specialized "shamanistic" enterprise. But, shamans also made and wore amulets that apparently came to symbolize and perhaps actually be the source of their power and prestige. Most examples of shamanistic paraphernalia focus on the importance of a belt on which are attached a number of amulets or other objects symbolizing the shaman's power. The belt was apparently never lost for fear of the shaman losing his potence and was a central feature in displays of power before other members of the shaman's community. Unfortunately, there is a virtual lack of reference in the published literature on the deposition of the shaman's belt after death--presumably it accompanied him to the grave.

Thus, for present purposes of analogy, it appears that if members of prehistoric Dorset societies had carved amulets similar to some of those found among ethnohistoric groups, their pattern of contextual distribution may provide some insight into the question of how the amulets were regarded.

The Tyara site on the Ungava Peninsula and sites in the Iglulik district from which there are artifacts with recorded contexts formed the basis for a cross-tabulation of find unit (or context) by artifact representation (Table XXXIII, Appendix B). An inspection of the table reveals that in the present sample, human representations, bear head, and shaman's teeth occurred both in house and midden contexts, but not associated with burials. Goose head, paddle-shaped objects, caribou, lance blade, tooth, and opposing walrus heads on a tube are all representations that were found only in house contexts. Complete walrus, complete whale, caribou hoof, caribou head, and dog representations were found only in midden contexts. Of objects found with burials, all were found in association with at least one other context and most often in two other contexts.

Three additional tables were constructed for the purpose of collapsing categories of representation and thus obtain some statistically significant associations (Tables XXXIV through XXXVI, Appendix B). In Table XXXIV, representation categories were collapsed to the following: human forms, sea mammals, land mammals, birds, decorated implements, and miniature implements. Table XXXV reduced the representation categories to three: (A) human forms, bears, and shaman's teeth; (B) goose forms, paddle-shaped objects, caribou forms, lance blade, teeth, and opposing walrus heads; (C) seals, walrus forms, whale forms, miniature harpoon heads, full-sized harpoon heads, tubes, caribou hooves, caribou heads, thin discs, antler section tube pieces, and dog forms. The resulting chi-square value of 9.90 yielded a significance level of .04 indicating some significance in difference of associations between the contexts of house, midden, and burial.

However, Table XXXVI crosstabulated find unit by the collapsed values "amulets" and "decorated implements" resulting in a probability of .08 that there was no significant difference between find units of artifact types.

Interpretation of Associations

From analysis of the present sample, it appears that there is a roughly even distribution in proportions of artifact types throughout the three contexts of house, midden, and burial. This could prompt the suggestion that for those items found in Table XXXIII (Appendix B) there was a use of certain objects in daily life as well as in the next existence of individuals. There is no indication that the items in the table that could be classed as amulets (e.g., complete bear, complete seal, and walrus tusks) are indeed specialized shaman paraphernalia, at least if ethnographic analogy is taken to its logical conclusion. Representations that could be classed as amulets maintain a distribution similar to others such as harpoon heads, tubes, thin discs (section tube bottoms) and section tube fragments (to an extent).

However, from this information new questions may be formulated that explain these distributions and may better illuminate the functions of Dorset art work as more and better controlled (chronologically as well as contextually controlled) data are recovered. The following chapter reviews the results of these preliminary analyses and presents a series of related questions that if tested by additional data may lift the blanket of obscurity from ever mounting problems of interpreting function as well as spatial and temporal patterning in the distribution of Dorset art throughout the eastern arctic.

CHAPTER V

CONCLUDING REMARKS

This study has rested on a foundation of iconic and analogic models as expressed in the symbolic description of artifact attributes in tabular form and in the use of ethnographic analogy. The use of these two kinds of models led to implementation of simple symbolic models where relationships between the attributes of artifacts were measured mathematically by performing tests of association on contingency tables. Although there were some limitations to the conclusions that could be drawn from these models because of the nature and size of the sample, they do at least indicate additional areas in which future research may concentrate.

One direction that may be taken in future studies is a reappraisal of the hypotheses of regional variation, temporal change, and function that were presented in earlier sections from the advantage of increased sample size. The size of the present sample does not include all known specimens of Dorset art and it is likely that some spurious results were obtained because of restrictions that were imposed on the analysis. For instance, only one example of crosses representing joints on the form of a carved animal was recorded in Table XIX (Appendix B), although it is known that crosses at joints on small carved forms are relatively common. Fortunately, this kind of sample error did not appear to be common in the present study, but it does represent a problem nonetheless. Good chronological and provenience control were also problems in the sense that many of the artifacts used were from surface collections that were accompanied by little or no information other than the site or locality in which they were found. Thus, the sample was an opportunistic one and one that varied significantly in size from site to site and region to region. If in the future, these problems may be overcome by means of obtaining a representative sample from each site used in the analysis, accurately controlling for intrasite provenience, and accurately dating associated archaeological remains, then we may gain a reasonable idea of the structure of prehistoric groups and changes through time that affected the art work.

Even though the present study is an initial step in the direction of guiding studies of Dorset art toward using statistical methods to show possible relationships that may be socially or culturally meaningful, some ground has been prepared for the day when an adequate and representative sample is obtained.

Beginning with the attempt to delineate regional styles, the present sample used in a series of crosstabulations has shown that there are a number of incised elements and motifs that are associated mainly with sites in the Iglulik district. Spine representations including double medial lines with either enclosed bars or chevrons, multiple rings around appendages, facial characteristics such as nostrils and mouth represented as a single incised line (or line with crossarms), a human face motif occurring on non-human-like forms, and other embellishments as lines diagonal to the long axis of an artifact, radiating lines on the bottoms of section tubes, and longitudinal lines with crossarms on inanimate forms, all appear to be specific to the Iglulik area. However, additional data and stratification of that data on the basis of tight chronological controls could be used to further test the validity of the above patterns in an attempt to isolate a regional style centered around sites in the Iglulik district within particular time periods. In addition, further data may not only confirm or refute the above characteristics as part of an "Iglulik style" of Dorset art, but define other elements that may be peculiar to the area. It may also be possible to start with site-specific elements recorded for Button Point, Alarnerk, and the Tyara site, and with new data arrive at postulations for other regional styles.

Changes in the relative realism or abstraction of art work through time was tested mainly through the use of data from sites in the Iglulik district where intrasite provenience information was available. Evidence produced by the present sample indicated that there is not a general realistic to abstract trend in the representation of life-forms carved from bone, ivory, antler, and other materials commonly used, but that the two types of representation covary on a similar scale. In this case, a simple increase of sample size is not the final solution to answering the question of what factors are influencing the distribution of relatively abstract forms in relation to relatively realistic forms? Here, we are suddenly faced with the necessity of going beyond the definition of archaeological "cultures" by trait lists and instead attempting to define extinct group structure and distinguishing between social groups that constituted the Dorset subtradition. By so doing, we may eventually be able to indicate if change in the form of conventionalism used between successive time periods (in this case, beach terraces) represents an actual change in some aspect of the same society, or if it represents the intrusion of a new social group to the same site (although occupying a different beach terrace during a different period of time). It is simply not enough to say that the type of conventionalism changes through time from realistic to abstract or even that it changes co-equally. We may well be dealing with different social groups and slightly different traditions although in outward appearance they are all similar enough to be grouped under the rubric of "Dorset."

Identifying the societies in which Dorset art was a "living" part brings us to the question of what functions did art fulfill in prehistoric Dorset societies? In an attempt to answer this question and still keep it within a framework of current discussion on Dorset art, an hypothesis of function was constructed around the idea that the art work represents a specialized shaman's craft. One possibility for testing this hypothesis using data in the present sample was by associating intrasite contexts with carved forms in order to check for specific associations between either house, midden, or burial contexts and certain kinds of artifacts. The assumption, based on a brief review of ethnographic literature, was that artifacts made and used exclusively by shamans would be deposited in different contexts than those made and used by ordinary members of a community. The results of several crosstabulations indicated that artifacts were found scattered throughout the three contexts (house, midden, and burial) and that there appeared to be no specific associations between any one context and one or a series of particular types of artifact. A provisional conclusion is that if some artifacts of a particular class were used by shamans, they may also have been made and used by other members of the community--a situation that at the present would be difficult to prove but nonetheless possible.

To summarize the results of the present study in capsule form it appears that there may be regional styles outside of the Newfoundland area, there do appear to be changes in the conventionalistic aspect of style at least in the Iglulik district although not necessarily forming a steady realistic to abstract trend through time, and Dorset art does not appear to be exclusively shaman's art. These hypotheses may, of course, be retested with additional data and perhaps used as a basis for experimentation with other kinds of statistical methods. It is a hope that they will, so that the preliminary conclusions drawn here may receive a more thorough airing. However, a new series of hypotheses may be generated from the present research that may lead to answering questions about the nature of art styles within the Dorset subtradition, their changes through time, and the functions of art within the prehistoric societies.

There are several questions that can be asked that may form a beginning in formulating new hypotheses. First, since there appear to be some elements characteristic of incising used in art work in the Iglulik district, do they actually represent part of an art style and if so, what is the temporal depth of the style and what are its relationships to other regions? Here, we may use material from the Iglulik district, Newfoundland, and possibly material from the Hudson Strait area to test the following hypothesis: there are distinct regional styles represented by a cluster of attributes unique to each area (although there may be a number of attributes shared by all areas). Testing this hypothesis would broaden the base of conclusions drawn in the present study or perhaps refute the idea that Iglulik and the Hudson Strait area (the latter used as a "third area" example) constitute areas of specific styles sufficiently different from one another and Newfoundland such that they may be classed as separate regions. Second, the question of stylistic change through time (*viz.*, realistic to abstract?) should be re-examined in the light of attributes other than "realistic" and "abstract" criteria. Measurement of incised attributes or configurations may be used in multivariate analyses such as factor analysis to show degrees of clustering of certain attributes through time. This would certainly relieve the researcher of making a large number of subjective decisions in classifying artifacts as either realistic or abstract. Our original hypothesis could then simply be restated: there are changes in art style through time within particular settlements. It may eventually be shown that changes through time occur regionally (however small the regions may be) and thus may show that there were some social forces at work that unified several different groups of people in the respect of art style. Thus, there may be some relationship between regional styles and changes through time. Third and last, what are the reasons for perpetuating the manufacture and use of what has been termed "Dorset art?" What are the functions of these artifacts within Dorset societies? Dropping for the moment the idea that Dorset art is exclusively shaman's art, we may think of other questions about functions. Did the people within the Dorset subtradition use amulets? What significance do incised embellishments on tools and containers have? What kinds of items did shamans have as a part of their "kit?" These are just a few questions that could be used in the formulation of a whole series of hypotheses on reconstructing a part of the cultural sphere within which items of Dorset art were made and used. To begin to answer any one of these questions means additional field work guided by a specific research design with these problems in mind.

The purpose of the present study has been to abstract several questions that have reappeared in the literature during recent years and attempt to test them using the statistical method of contingency tables and chi-square measure of association. In retrospect, the value of this study is basically heuristic. It has been an attempt to discover answers to certain questions that have led to other questions. In the final analysis, any of these questions must be answered through additional field work where the guiding research design incorporates them into its structure. These questions must be asked before going into the field. The problems of interpretation encountered in the present study are real and if they may find their way into the design of future studies, they may also find solutions.

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APPENDICES

APPENDIX A

FREQUENCY DISTRIBUTIONS OF DORSET ART ATTRIBUTES

The following tables summarize the frequencies of attributes studied in the present sample of 250 Dorset artifacts. Each table contains a list of related variables (e.g., site or locality, level, and find unit) in the column on the left. To the right of each variable is listed its respective value (*viz.,* the numeric code given it for purposes of computer analyses), the absolute frequency, the percentage represented in the entire inventory, the adjusted frequency (percentage of the total represented by the variable, excluding missing data), and the cumulative adjusted frequency (percentage of the total represented by the accumulation of adjusted frequencies for that particular row of figures). Under the heading *Value,* the category *Blank* signifies that the particular category on some IBM cards was not filled and that the data are missing or not obtainable. The tables also list totals, the number of valid observations (in this case, artifacts), and the number of missing observations (artifacts for which the particular data are not obtainable).

TABLE I

NUMBER OF ARTIFACTS FROM SITES AND LOCALITIES

```
VARIABLE   SITE        SITE OR LOCALITY

VALUE LABEL                            VALUE   ABSOLUTE   RELATIVE   ADJUSTED  CUMULATIVE
                                               FREQUENCY  FREQUENCY  FREQUENCY  ADJ FREQ
                                                          (PERCENT)  (PERCENT)  (PERCENT)
                                       - - - - - - - - - - - - - - - - - - - - - - - - -

ALARNERK SITE                              1       65        26.0       26.4       26.4
BIRKET SITE                                2        8         3.2        3.3       29.7
HALL BEACH SITE                            3        3         1.2        1.2       30.9
ROWLEY SITE                                4        6         2.4        2.4       33.3
KAERSUT SITE                               5       15         6.0        6.1       39.4
JENS MUNK SITE                             6       20         8.0        8.1       47.6
COATS MANSEL ISLANDS                       7       27        10.8       11.0       58.5
LAKE HARBOUR                               8        1          .4         .4       58.9
BUTTON POINT                               9       11         4.4        4.5       63.4
ANDREW GORDON BAY I                       10        1          .4         .4       63.8
CLYDE INLET                               11        1          .4         .4       64.2
TYARA SITE                                12        4         1.6        1.6       65.9
IGLOOLIK                                  13       84        33.6       34.1      100.0
                                       BLANK        4         1.6    MISSING      100.0
                                                -------    -------    -------    -------
                                       TOTAL      250       100.0      100.0      100.0

VALID   OBSERVATIONS -        246
MISSING OBSERVATIONS -          4
```

TABLE II

NUMBER OF ARTIFACTS FROM LEVELS (METERS ABOVE SEA LEVEL) 0.00 LEVEL EQUALS UNKNOWN PROVENIENCE

```
VARIABLE   LEVEL       METERS ABOVE SEA LEVEL

VALUE LABEL                          VALUE    ABSOLUTE     RELATIVE     ADJUSTED    CUMULATIVE
                                              FREQUENCY    FREQUENCY    FREQUENCY    ADJ FREQ
                                                           (PERCENT)    (PERCENT)   (PERCENT)
                                     - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                      0.00       142          56.8         56.8         56.8

                                      8.00        14           5.6          5.6         62.4

                                      9.00        10           4.0          4.0         66.4

                                     10.00         4           1.6          1.6         68.0

                                     12.00         3           1.2          1.2         69.2

                                     13.00        14           5.6          5.6         74.8

                                     14.00         1            .4           .4         75.2

                                     15.00        32          12.8         12.8         88.0

                                     17.00         6           2.4          2.4         90.4

                                     18.00         1            .4           .4         90.8

                                     19.00         4           1.6          1.6         92.4

                                     20.00         4           1.6          1.6         94.0

                                     22.00        15           6.0          6.0        100.0
                                              -------      -------      -------      -------
                                     TOTAL       250         100.0        100.0        100.0

VALID   OBSERVATIONS -       250
MISSING OBSERVATIONS -         0
```

TABLE III

NUMBER OF ARTIFACTS FROM FIND UNIT PROVENIENCES WITHIN SITES

```
VARIABLE   UNIT        FIND UNIT

VALUE LABEL                          VALUE    ABSOLUTE     RELATIVE     ADJUSTED    CUMULATIVE
                                              FREQUENCY    FREQUENCY    FREQUENCY    ADJ FREQ
                                                           (PERCENT)    (PERCENT)   (PERCENT)
                                     - - - - - - - - - - - - - - - - - - - - - - - - - - - -

HOUSE                                    1        54          21.6         50.9         50.9

MIDDEN                                   2        39          15.6         36.8         87.7

BURIAL                                   3        13           5.2         12.3        100.0

                                     BLANK       144          57.6       MISSING       100.0
                                              -------      -------      -------      -------
                                     TOTAL       250         100.0        100.0        100.0

VALID   OBSERVATIONS -       106
MISSING OBSERVATIONS -       144
```

TABLE IV

MATERIAL USED IN MANUFACTURING DORSET ARTIFACTS

```
VARIABLE    MATRL        MATERIAL

VALUE LABEL                                  VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                     FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                 (PERCENT)   (PERCENT)   (PERCENT)
                                             - - - - - - - - - - - - - - - - - - - - - - - - - - -

IVORY                                            1        130        52.0        52.0        52.0

BONE                                             2         45        18.0        18.0        70.0

ANTLER                                           3         58        23.2        23.2        93.2

STEATITE                                         4          1          .4          .4        93.6

WOOD                                             5         14         5.6         5.6        99.2

TOOTH                                            6          1          .4          .4        99.6

SHELL                                            7          1          .4          .4       100.0

                                             BLANK          0         0.0     MISSING       100.0
                                                     -------     -------     -------     -------
                                             TOTAL        250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

TABLE V

FREQUENCY OF CONVENTIONALISM TYPE AMONG DORSET ARTIFACTS

```
VARIABLE    CONVENT      CONVENTIONALISM

VALUE LABEL                                  VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                     FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                 (PERCENT)   (PERCENT)   (PERCENT)
                                             - - - - - - - - - - - - - - - - - - - - - - - - - - -

3D REALISTIC                                     1         83        33.2        53.5        53.5

3D ABSTRACT                                      2         32        12.8        20.6        74.2

2D ABSTRACT                                      3         39        15.6        25.2        99.4

2D REALISTIC                                     4          1          .4          .6       100.0

                                             BLANK         95        38.0     MISSING       100.0
                                                     -------     -------     -------     -------
                                             TOTAL        250       100.0       100.0       100.0

VALID   OBSERVATIONS -        155
MISSING OBSERVATIONS -         95
```

TABLE VI

FREQUENCY OF REPRESENTATION TYPE AMONG DORSET ARTIFACTS

```
VARIABLE   REP          REPRESENTATION

VALUE LABEL                      VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                         FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                     (PERCENT)   (PERCENT)   (PERCENT)
                                 - - - - - - - - - - - - - - - - - - - - - - - - - - -

COMPLETE HUMAN                     1         9          3.6         4.1         4.1
HUMAN MASK-MASKETTE                2         9          3.6         4.1         8.2
COMPLETE BEAR                      3        12          4.8         5.5        13.7
BEAR HEAD                          4         3          1.2         1.4        15.1
COMPLETE SEAL                      5        16          6.4         7.3        22.4
COMPLETE WALRUS                    6         3          1.2         1.4        23.7
WALRUS HEAD                        7         6          2.4         2.7        26.5
WALRUS TUSKS                       8         3          1.2         1.4        27.9
COMPLETE OWL                       9         1           .4          .5        28.3
COMPLETE GOOSE                    10         1           .4          .5        28.8
GOOSE HEAD                        11         1           .4          .5        29.2
COMPLETE WHALE                    12         3          1.2         1.4        30.6
COMPLETE FALCON                   13         1           .4          .5        31.1
MINI HARPOON HEAD                 14        10          4.0         4.6        35.6
FULL HARPOON HEAD                 15         8          3.2         3.7        39.3
≠SHAMAN≠S≠ TEETH                  16         4          1.6         1.8        41.1
PADDLE SHAPED OBJECT              17        13          5.2         5.9        47.0
TUBE                              18        11          4.4         5.0        52.1
WEASEL                            19         1           .4          .5        52.5
CARIBOU                           20         1           .4          .5        53.0
CARIBOU HOOF                      21         3          1.2         1.4        54.3
CARIBOU HEAD                      22         1           .4          .5        54.8
THIN DISC                         23        36         14.4        16.4        71.2
LANCE BLADE                       24         1           .4          .5        71.7

ANTLER SEC TUBE FRAG              25        52         20.8        23.7        95.4
TOOTH                             26         3          1.2         1.4        96.8
DOG                               27         1           .4          .5        97.3
OPPOSING BEAR HEADS               28         1           .4          .5        97.7
BEAR HEADS 1 THORAX               29         1           .4          .5        98.2
BEAR HEADS 2 THORAXS              30         1           .4          .5        98.6
OPPOS WALRUS HEADS                31         1           .4          .5        99.1
OPP CARIBOU-BEAR HDS              32         1           .4          .5        99.5
WEASEL HDS 1 THORAX               33         1           .4          .5       100.0

                                 BLANK      31         12.4      MISSING      100.0
                                         -------     -------     -------     -------
                                 TOTAL     250        100.0       100.0       100.0

VALID    OBSERVATIONS -       219
MISSING OBSERVATIONS -         31
```

TABLE VII

FREQUENCY OF ATTACHMENT PERFORATIONS AMONG DORSET ARTIFACTS

```
VARIABLE   VAR008      PROXIMAL END ATTACHMENT PERFORATIONS

VALUE LABEL                                   VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                      FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                  (PERCENT)   (PERCENT)   (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0      168        67.2        67.7        67.7

PRESENT                                           1       80        32.0        32.3       100.0

                                              BLANK        2          .8      MISSING      100.0
                                                     -------     -------     -------     -------
                                              TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -         248
MISSING OBSERVATIONS -           2
```

```
VARIABLE   VAR009      MEDIAL POSITION PERFORATIONS

VALUE LABEL                                   VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                      FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                  (PERCENT)   (PERCENT)   (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0      203        81.2        81.5        81.5

PRESENT                                           1       46        18.4        18.5       100.0

                                              BLANK        1          .4      MISSING      100.0
                                                     -------     -------     -------     -------
                                              TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -         249
MISSING OBSERVATIONS -           1
```

```
VARIABLE   VAR010      DISTAL END PERFORATIONS

VALUE LABEL                                   VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                      FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                  (PERCENT)   (PERCENT)   (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0      180        72.0        73.2        73.2

PRESENT                                           1       66        26.4        26.8       100.0

                                              BLANK        4         1.6      MISSING      100.0
                                                     -------     -------     -------     -------
                                              TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -         246
MISSING OBSERVATIONS -           4
```

TABLE VIII

FREQUENCY OF OTHER PERFORATIONS AMONG DORSET ARTIFACTS

```
VARIABLE   VAR011     SLOT PERFORATIONS ON ARTIFACT SURFACE

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                           - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                        0       233        93.2        93.2        93.2

PRESENT                                       1        17         6.8         6.8       100.0

                                          BLANK         0         0.0     MISSING       100.0
                                                  -------     -------     -------     -------
                                          TOTAL       250       100.0       100.0       100.0

VALID   OBSERVATIONS -      250
MISSING OBSERVATIONS -        0
```

TABLE IX

FREQUENCY OF INCISED SLOTS AMONG DORSET ARTIFACTS

```
VARIABLE   VAR012     SINGLE VENTRAL SLOT WITHOUT INSERT

VALUE LABEL                               VALUE   ABSOLUTE   RELATIVE   ADJUSTED   CUMULATIVE
                                                  FREQUENCY  FREQUENCY  FREQUENCY   ADJ FREQ
                                                             (PERCENT)  (PERCENT)   (PERCENT)
                                         - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                      0       246        98.4       98.4        98.4

PRESENT                                     1         4         1.6        1.6       100.0

                                          BLANK       0         0.0     MISSING      100.0
                                                  -------    -------    -------    -------
                                          TOTAL     250       100.0      100.0      100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

```
VARIABLE   VAR013     SINGLE VENTRAL SLOT WITH INSERT

VALUE LABEL                               VALUE   ABSOLUTE   RELATIVE   ADJUSTED   CUMULATIVE
                                                  FREQUENCY  FREQUENCY  FREQUENCY   ADJ FREQ
                                                             (PERCENT)  (PERCENT)   (PERCENT)
                                         - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                      0       249        99.6       99.6        99.6

PRESENT                                     1         1          .4         .4       100.0

                                          BLANK       0         0.0     MISSING      100.0
                                                  -------    -------    -------    -------
                                          TOTAL     250       100.0      100.0      100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

```
VARIABLE   VAR014     DOUBLE VENTRAL SLOT WITHOUT INSERTS

VALUE LABEL                               VALUE   ABSOLUTE   RELATIVE   ADJUSTED   CUMULATIVE
                                                  FREQUENCY  FREQUENCY  FREQUENCY   ADJ FREQ
                                                             (PERCENT)  (PERCENT)   (PERCENT)
                                         - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                      0       248        99.2       99.2        99.2

PRESENT                                     1         2          .8         .8       100.0

                                          BLANK       0         0.0     MISSING      100.0
                                                  -------    -------    -------    -------
                                          TOTAL     250       100.0      100.0      100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

TABLE X

FREQUENCY OF SPINE REPRESENTATION TYPES AMONG DORSET ARTIFACTS

```
VARIABLE    VAR015      SINGLE INCISED MEDIAL LINE ON BACK

VALUE LABEL                                VALUE    ABSOLUTE    RELATIVE    ADJUSTED    CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                          - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT                                         0       226        90.4        90.4        90.4

PRESENT                                        1        24         9.6         9.6       100.0

                                           BLANK         0         0.0     MISSING       100.0
                                                   -------     -------     -------     -------
                                           TOTAL       250       100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0



VARIABLE    VAR016      DOUBLE MEDIAL LINE ON BACK

VALUE LABEL                                VALUE    ABSOLUTE    RELATIVE    ADJUSTED    CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                          - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT                                         0       248        99.2        99.2        99.2

PRESENT                                        1         2          .8          .8       100.0

                                           BLANK         0         0.0     MISSING       100.0
                                                   -------     -------     -------     -------
                                           TOTAL       250       100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0



VARIABLE    VAR017      DOUBLE MEDIAL LINE ON BACK-PARALLEL BARS

VALUE LABEL                                VALUE    ABSOLUTE    RELATIVE    ADJUSTED    CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                          - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT                                         0       248        99.2        99.2        99.2

PRESENT                                        1         2          .8          .8       100.0

                                           BLANK         0         0.0     MISSING       100.0
                                                   -------     -------     -------     -------
                                           TOTAL       250       100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

TABLE X (cont.)

```
VARIABLE   VAR018     DOUBLE MEDIAL LINE W ENCLOSED CHEVRONS

VALUE LABEL                                   VALUE    ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                       FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                   (PERCENT)   (PERCENT)   (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0       248         99.2        99.2        99.2

PRESENT                                           1         2           .8          .8       100.0

                                              BLANK         0          0.0     MISSING       100.0
                                                     -------      -------     -------     -------
                                              TOTAL       250        100.0       100.0       100.0

VALID   OBSERVATIONS -          250
MISSING OBSERVATIONS -            0




VARIABLE   VAR019     SINGLE MEDIAL LINE ON SIDE

VALUE LABEL                                   VALUE    ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                       FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                   (PERCENT)   (PERCENT)   (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0       250        100.0       100.0       100.0

                                              BLANK         0          0.0     MISSING       100.0
                                                     -------      -------     -------     -------
                                              TOTAL       250        100.0       100.0       100.0

VALID   OBSERVATIONS -          250
MISSING OBSERVATIONS -            0
```

TABLE XI

FREQUENCY OF RIB REPRESENTATION TYPES AMONG DORSET ARTIFACTS

```
VARIABLE   VAR020     2 SETS PARALLEL-OBLIQUE LINES UPPER BACK

VALUE LABEL                                 VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                    FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0      243        97.2        97.2        97.2

PRESENT                                         1        7         2.8         2.8       100.0

                                            BLANK        0         0.0      MISSING      100.0
                                                   -------     -------      -------     -------
                                            TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

```
VARIABLE   VAR021     2 SETS PARALLEL-OBLIQUE LINES MID BACK

VALUE LABEL                                 VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                    FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0      233        93.2        93.2        93.2

PRESENT                                         1       17         6.8         6.8       100.0

                                            BLANK        0         0.0      MISSING      100.0
                                                   -------     -------      -------     -------
                                            TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

```
VARIABLE   VAR022     2 SETS PARALLEL-OBLIQUE LINES LOWER BACK

VALUE LABEL                                 VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                    FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0      246        98.4        98.8        98.8

PRESENT                                         1        3         1.2         1.2       100.0

                                            BLANK        1          .4      MISSING      100.0
                                                   -------     -------      -------     -------
                                            TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -        249
MISSING OBSERVATIONS -          1
```

TABLE XII

FREQUENCY OF RIB OR PERIPHERAL NERVE REPRESENTATION TYPES AMONG DORSET ARTIFACTS

```
VARIABLE    VAR023      SHORT PARALLEL LINES ON UPPER BACK

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE     ADJUSTED    CUMULATIVE
                                                   FREQUENCY   FREQUENCY    FREQUENCY    ADJ FREQ
                                                               (PERCENT)    (PERCENT)   (PERCENT)
                                          - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT                                        0       237         94.8         94.8        94.8

PRESENT                                       1        13          5.2          5.2       100.0

                                          BLANK         0          0.0      MISSING       100.0
                                                  -------      -------      -------     -------
                                          TOTAL       250        100.0        100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

```
VARIABLE    VAR024      SHORT PARALLEL LINES ON MID BACK

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE     ADJUSTED    CUMULATIVE
                                                   FREQUENCY   FREQUENCY    FREQUENCY    ADJ FREQ
                                                               (PERCENT)    (PERCENT)   (PERCENT)
                                          - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT                                        0       249         99.6         99.6        99.6

PRESENT                                       1         1           .4           .4       100.0

                                          BLANK         0          0.0      MISSING       100.0
                                                  -------      -------      -------     -------
                                          TOTAL       250        100.0        100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

```
VARIABLE    VAR025      SHORT PARALLEL LINES ON LOWER BACK

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE     ADJUSTED    CUMULATIVE
                                                   FREQUENCY   FREQUENCY    FREQUENCY    ADJ FREQ
                                                               (PERCENT)    (PERCENT)   (PERCENT)
                                          - - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT                                        0       241         96.4         96.4        96.4

PRESENT                                       1         9          3.6          3.6       100.0

                                          BLANK         0          0.0      MISSING       100.0
                                                  -------      -------      -------     -------
                                          TOTAL       250        100.0        100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

TABLE XII (cont.)

```
VARIABLE    VAR026      SHORT PARALLEL LINES ON ENTIRE BACK

VALUE LABEL                                   VALUE    ABSOLUTE      RELATIVE      ADJUSTED     CUMULATIVE
                                                       FREQUENCY     FREQUENCY     FREQUENCY    ADJ FREQ
                                                                     (PERCENT)     (PERCENT)    (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0        246          98.4          98.4          98.4

PRESENT                                           1          4           1.6           1.6         100.0

                                              BLANK          0           0.0       MISSING         100.0
                                                       -------       -------       -------       -------
                                              TOTAL        250         100.0         100.0         100.0

VALID    OBSERVATIONS -         250
MISSING OBSERVATIONS -            0




VARIABLE    VAR027      SHORT PARALLEL LINES ON SIDE-INTERSECTNG

VALUE LABEL                                   VALUE    ABSOLUTE      RELATIVE      ADJUSTED     CUMULATIVE
                                                       FREQUENCY     FREQUENCY     FREQUENCY    ADJ FREQ
                                                                     (PERCENT)     (PERCENT)    (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0        246          98.4          98.4          98.4

PRESENT                                           1          4           1.6           1.6         100.0

                                              BLANK          0           0.0       MISSING         100.0
                                                       -------       -------       -------       -------
                                              TOTAL        250         100.0         100.0         100.0

VALID    OBSERVATIONS -         250
MISSING OBSERVATIONS -            0
```

TABLE XIII

FREQUENCY OF LIMB REPRESENTATION TYPES AMONG DORSET ARTIFACTS

```
VARIABLE    VAR028      #CROSSES# AT JOINTS

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                  FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                              (PERCENT)   (PERCENT)   (PERCENT)
                                          ----------------------------------------------------

ABSENT                                         0        247        98.8        98.8        98.8

PRESENT                                        1          3         1.2         1.2       100.0

                                           BLANK          0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                           TOTAL        250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0



VARIABLE    VAR029      RINGS,LINES AROUND APPENDAGES-NEAR JOINT

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                  FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                              (PERCENT)   (PERCENT)   (PERCENT)
                                          ----------------------------------------------------

ABSENT                                         0        243        97.2        97.2        97.2

PRESENT                                        1          7         2.8         2.8       100.0

                                           BLANK          0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                           TOTAL        250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0



VARIABLE    VAR030      RINGS,LINES AROUND APPENDAGES-OTHER

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                  FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                              (PERCENT)   (PERCENT)   (PERCENT)
                                          ----------------------------------------------------

ABSENT                                         0        246        98.4        98.4        98.4

PRESENT                                        1          4         1.6         1.6       100.0

                                           BLANK          0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                           TOTAL        250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

TABLE XIII (cont.)

```
VARIABLE   VAR031     LONGITUDINAL LINES RUNNING DOWN APPENDAG

VALUE LABEL                                  VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                     FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                 (PERCENT)   (PERCENT)   (PERCENT)
                                             - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                           0      244        97.6        97.6        97.6

PRESENT                                          1        6         2.4         2.4       100.0

                                             BLANK        0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                             TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0



VARIABLE   VAR032     RAD PARALLEL-OBLIQUES MED POS LIMB SHAFT

VALUE LABEL                                  VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                     FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                 (PERCENT)   (PERCENT)   (PERCENT)
                                             - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                           0      250       100.0       100.0       100.0

                                             BLANK        0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                             TOTAL      250       100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

TABLE XIV

FREQUENCY OF NECK AND HEAD INCISED ELEMENTS AMONG DORSET ARTIFACTS

```
VARIABLE   VAR033     MULTIPLE RINGS AROUND NECK

VALUE LABEL                                   VALUE   ABSOLUTE   RELATIVE   ADJUSTED   CUMULATIVE
                                                      FREQUENCY  FREQUENCY  FREQUENCY  ADJ FREQ
                                                                 (PERCENT)  (PERCENT)  (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0        234       93.6       93.6        93.6

PRESENT                                         1         16        6.4        6.4       100.0

                                              BLANK        0        0.0     MISSING      100.0
                                                       -------    -------    -------    -------
                                              TOTAL      250      100.0      100.0      100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0




VARIABLE   VAR034     ≠CROSSES≠ BEHIND EARS

VALUE LABEL                                   VALUE   ABSOLUTE   RELATIVE   ADJUSTED   CUMULATIVE
                                                      FREQUENCY  FREQUENCY  FREQUENCY  ADJ FREQ
                                                                 (PERCENT)  (PERCENT)  (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0        247       98.8       98.8        98.8

PRESENT                                         1          3        1.2        1.2       100.0

                                              BLANK        0        0.0     MISSING      100.0
                                                       -------    -------    -------    -------
                                              TOTAL      250      100.0      100.0      100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0




VARIABLE   VAR035     ≠CROSS≠ ON TOP OF HEAD

VALUE LABEL                                   VALUE   ABSOLUTE   RELATIVE   ADJUSTED   CUMULATIVE
                                                      FREQUENCY  FREQUENCY  FREQUENCY  ADJ FREQ
                                                                 (PERCENT)  (PERCENT)  (PERCENT)
                                              - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0        246       98.4       98.4        98.4

PRESENT                                         1          4        1.6        1.6       100.0

                                              BLANK        0        0.0     MISSING      100.0
                                                       -------    -------    -------    -------
                                              TOTAL      250      100.0      100.0      100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

TABLE XIV (cont.)

```
VARIABLE   VAR036     *CROSS* BETWEEN EYES EXTENDING OVER FACE

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                           - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                         0      246         98.4        98.4        98.4

PRESENT                                        1        4          1.6         1.6       100.0

                                           BLANK        0          0.0     MISSING       100.0
                                                  -------     --------     -------     -------
                                           TOTAL      250        100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0




VARIABLE   VAR037     LINE OR SLOT MEDIAL BETWEEN EYES

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                           - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                         0      242         96.8        96.8        96.8

PRESENT                                        1        8          3.2         3.2       100.0

                                           BLANK        0          0.0     MISSING       100.0
                                                  -------     --------     -------     -------
                                           TOTAL      250        100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0




VARIABLE   VAR038     NOSTRILS

VALUE LABEL                                VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                   FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                               (PERCENT)   (PERCENT)   (PERCENT)
                                           - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                         0      242         96.8        96.8        96.8

PRESENT                                        1        8          3.2         3.2       100.0

                                           BLANK        0          0.0     MISSING       100.0
                                                  -------     --------     -------     -------
                                           TOTAL      250        100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

TABLE XIV (cont.)

```
VARIABLE    VAR039      LINE,INTERSECTING SHORTER LINES--MOUTH

VALUE LABEL                                  VALUE    ABSOLUTE     RELATIVE     ADJUSTED    CUMULATIVE
                                                      FREQUENCY    FREQUENCY    FREQUENCY    ADJ FREQ
                                                                   (PERCENT)    (PERCENT)    (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0        247          98.8         98.8         98.8

PRESENT                                         1          3           1.2          1.2        100.0

                                            BLANK          0           0.0      MISSING        100.0
                                                     -------       -------      -------      -------
                                            TOTAL        250         100.0        100.0        100.0

VALID   OBSERVATIONS -          250
MISSING OBSERVATIONS -            0




VARIABLE    VAR040      LINE WITHOUT INTERSECTING LINES--MOUTH

VALUE LABEL                                  VALUE    ABSOLUTE     RELATIVE     ADJUSTED    CUMULATIVE
                                                      FREQUENCY    FREQUENCY    FREQUENCY    ADJ FREQ
                                                                   (PERCENT)    (PERCENT)    (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0        239          95.6         95.6         95.6

PRESENT                                         1         11           4.4          4.4        100.0

                                            BLANK          0           0.0      MISSING        100.0
                                                     -------       -------      -------      -------
                                            TOTAL        250         100.0        100.0        100.0

VALID   OBSERVATIONS -          250
MISSING OBSERVATIONS -            0




VARIABLE    VAR041      LATITUDINOUS LINES COVERING FACE

VALUE LABEL                                  VALUE    ABSOLUTE     RELATIVE     ADJUSTED    CUMULATIVE
                                                      FREQUENCY    FREQUENCY    FREQUENCY    ADJ FREQ
                                                                   (PERCENT)    (PERCENT)    (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0        246          98.4         98.4         98.4

PRESENT                                         1          4           1.6          1.6        100.0

                                            BLANK          0           0.0      MISSING        100.0
                                                     -------       -------      -------      -------
                                            TOTAL        250         100.0        100.0        100.0

VALID   OBSERVATIONS -          250
MISSING OBSERVATIONS -            0
```

TABLE XIV (cont.)

```
VARIABLE   VAR042     LATITUDINOUS LINES BELOW MOUTH ONLY

VALUE LABEL                                   VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                      FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                  (PERCENT)   (PERCENT)   (PERCENT)
                                             - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                            0       249        99.6        99.6        99.6

PRESENT                                           1         1          .4          .4       100.0

                                              BLANK         0         0.0     MISSING       100.0
                                                      -------     -------     -------     -------
                                              TOTAL       250       100.0       100.0       100.0

VALID   OBSERVATIONS -        250
MISSING OBSERVATIONS -          0
```

TABLE XV

FREQUENCY OF OTHER INCISED ELEMENTS AMONG DORSET ARTIFACTS

```
VARIABLE   VAR043     HUMAN FACE MOTIF

VALUE LABEL                                     VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                        FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                    (PERCENT)   (PERCENT)   (PERCENT)
                                               - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                              0      246         98.4        98.4        98.4

PRESENT                                             1        4          1.6         1.6       100.0

                                                BLANK        0          0.0     MISSING       100.0
                                                        --------    --------    --------    --------
                                                TOTAL      250        100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0




VARIABLE   VAR044     #CROSSES#

VALUE LABEL                                     VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                        FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                    (PERCENT)   (PERCENT)   (PERCENT)
                                               - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                              0      223         89.2        89.2        89.2

PRESENT                                             1       27         10.8        10.8       100.0

                                                BLANK        0          0.0     MISSING       100.0
                                                        --------    --------    --------    --------
                                                TOTAL      250        100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0




VARIABLE   VAR045     LONGITUDINAL LINE-S

VALUE LABEL                                     VALUE   ABSOLUTE    RELATIVE    ADJUSTED   CUMULATIVE
                                                        FREQUENCY   FREQUENCY   FREQUENCY   ADJ FREQ
                                                                    (PERCENT)   (PERCENT)   (PERCENT)
                                               - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                              0      241         96.4        96.4        96.4

PRESENT                                             1        9          3.6         3.6       100.0

                                                BLANK        0          0.0     MISSING       100.0
                                                        --------    --------    --------    --------
                                                TOTAL      250        100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

TABLE XV (cont.)

```
VARIABLE    VAR046      PARALLEL LINES PERPENDICULR TO LONG AXIS

VALUE LABEL                                 VALUE   ABSOLUTE    RELATIVE    ADJUSTED    CUMULATIVE
                                                    FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT
                                                0       215        86.0        86.0        86.0
PRESENT
                                                1        35        14.0        14.0       100.0

                                            BLANK         0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                            TOTAL       250       100.0       100.0       100.0
VALID    OBSERVATIONS -         250
MISSING OBSERVATIONS -            0
```

```
VARIABLE    VAR047      LINE-S DIAGONAL TO LONG AXIS OF ARTIFACT

VALUE LABEL                                 VALUE   ABSOLUTE    RELATIVE    ADJUSTED    CUMULATIVE
                                                    FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT
                                                0       242        96.8        96.8        96.8
PRESENT
                                                1         8         3.2         3.2       100.0

                                            BLANK         0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                            TOTAL       250       100.0       100.0       100.0
VALID    OBSERVATIONS -         250
MISSING OBSERVATIONS -            0
```

```
VARIABLE    VAR048      LINES RADIATING FROM A CENTRAL POINT

VALUE LABEL                                 VALUE   ABSOLUTE    RELATIVE    ADJUSTED    CUMULATIVE
                                                    FREQUENCY   FREQUENCY   FREQUENCY    ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -
ABSENT
                                                0       243        97.2        97.2        97.2
PRESENT
                                                1         7         2.8         2.8       100.0

                                            BLANK         0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                            TOTAL       250       100.0       100.0       100.0
VALID    OBSERVATIONS -         250
MISSING OBSERVATIONS -            0
```

TABLE XV (cont.)

```
VARIABLE   VAR049     LONGITUDINAL LINES WITH CROSS ARMS

VALUE LABEL                                  VALUE   ABSOLUTE   RELATIVE    ADJUSTED   CUMULATIVE
                                                     FREQUENCY  FREQUENCY   FREQUENCY   ADJ FREQ
                                                                (PERCENT)   (PERCENT)   (PERCENT)
                                            - - - - - - - - - - - - - - - - - - - - - - - - - - -

ABSENT                                          0       246        98.4        98.4        98.4

PRESENT                                         1         4         1.6         1.6       100.0

                                            BLANK         0         0.0     MISSING       100.0
                                                    -------     -------     -------     -------
                                            TOTAL       250       100.0       100.0       100.0

VALID   OBSERVATIONS -         250
MISSING OBSERVATIONS -           0
```

APPENDIX B

CORRELATIONS AMONG DORSET ART ATTRIBUTES

The following tables show relationships between attributes that contribute to an understanding of the place of art within prehistoric Dorset culture. All of the tables are contingency tables from which several statistics are obtained: chi-square, degrees of freedom, and significance; Cramer's V; and Pearson's contingency coefficient. For 2 X 2 tables with small frequencies, Fisher's Exact Test and Phi are given instead of a chi-square value.

The tables in this appendix are ordered such that those pertaining to each hypothesis test are presented in turn. Tables I-XXX form the statistical basis on which the first hypothesis concerning regional art styles is tested. The second hypothesis, trends in conventionalism, is tested on the basis of statistical data presented in Tables XXXI-XXXII. And, the third hypothesis related to the functions of Dorset art in Dorset culture is tested on the basis of data found in Tables XXXIII-XXXVI.

TABLE I

CROSSTABULATION OF ARTIFACT REPRESENTATION BY SITE

```
                      SITE                                                                                       SITE
        COUNT       I
      ROW PCT       IALARNERK BIRKET S HALL BEA ROWLEY S KAERSUT  JENS MUN COATS MA LAKE HAR BUTTON P ANDREW G CLYDE IN TYARA SI IGLOOLIK     ROW
      COL PCT       I SITE    ITE      CH SITE  ITE      SITE     K SITE   NSEL ISL BOUR     OINT     ORDON BA LET      TE                   TOTAL
      TOT PCT       I       1I       2I       3I       4I       5I       6I       7I       8I       9I      10I      11I      12I      13I
REP         --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  1 I      1 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      2 I      0 I      0 I      0 I      2 I      6
  COMPLETE HUMAN    I   16.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   16.7 I    0.0 I   33.3 I    0.0 I    0.0 I    0.0 I   33.3 I    2.8
                    I    1.8 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    3.7 I    0.0 I   20.0 I    0.0 I    0.0 I    0.0 I    2.7 I
                    I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I     .9 I    0.0 I    0.0 I    0.0 I     .9 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  2 I      2 I      0 I      0 I      0 I      0 I      1 I      1 I      0 I      4 I      0 I      0 I      0 I      1 I      9
  HUMAN MASK-MASKE  I   22.2 I    0.0 I    0.0 I    0.0 I    0.0 I   11.1 I   11.1 I    0.0 I   44.4 I    0.0 I    0.0 I    0.0 I   11.1 I    4.2
                    I    3.6 I    0.0 I    0.0 I    0.0 I    0.0 I    7.7 I    3.7 I    0.0 I   40.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                    I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I     .5 I    0.0 I    1.9 I    0.0 I    0.0 I    0.0 I     .5 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  3 I      1 I      0 I      0 I      0 I      1 I      1 I      1 I      1 I      1 I      0 I      0 I      2 I      4 I     12
  COMPLETE BEAR     I    8.3 I    0.0 I    0.0 I    0.0 I    8.3 I    8.3 I    8.3 I    8.3 I    8.3 I    0.0 I    0.0 I   16.7 I   33.3 I    5.6
                    I    1.8 I    0.0 I    0.0 I    0.0 I    6.7 I    7.7 I    3.7 I  100.0 I   10.0 I    0.0 I    0.0 I   50.0 I    5.5 I
                    I     .5 I    0.0 I    0.0 I    0.0 I     .5 I     .5 I     .5 I     .5 I     .5 I    0.0 I    0.0 I     .9 I    1.9 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  4 I      1 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      3
  BEAR HEAD         I   33.3 I    0.0 I    0.0 I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   33.3 I    1.4
                    I    1.8 I    0.0 I    0.0 I   16.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                    I     .5 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  5 I      4 I      1 I      0 I      0 I      1 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      9 I     16
  COMPLETE SEAL     I   25.0 I    6.3 I    0.0 I    0.0 I    6.3 I    0.0 I    0.0 I    0.0 I    6.3 I    0.0 I    0.0 I    0.0 I   56.3 I    7.4
                    I    7.3 I   14.3 I    0.0 I    0.0 I    6.7 I    0.0 I    0.0 I    0.0 I   10.0 I    0.0 I    0.0 I    0.0 I   12.3 I
                    I    1.9 I     .5 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    4.2 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  6 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      2 I      3
  COMPLETE WALRUS   I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   66.7 I    1.4
                    I    1.8 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.7 I
                    I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .9 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  7 I      2 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      4 I      6
  WALRUS HEAD       I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   66.7 I    2.8
                    I    3.6 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    5.5 I
                    I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.9 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              COLUMN      55        7        2        6       15       13       27        1       10        1        1        4       73      215
               TOTAL    25.6      3.3       .9      2.8      7.0      6.0     12.6       .5      4.7       .5       .5      1.9     34.0    100.0
(CONTINUED)
```

TABLE I (cont.)

```
                  SITE                                                                                          SITE
          COUNT  I                                                                                              I
         ROW PCT IALARNERK BIRKET S HALL BEA ROWLEY S KAERSUT  JENS MUN COATS MA LAKE HAR BUTTON P ANDREW GICLYDE IN TYARA SI IGLOOLIK   ROW
         COL PCT I SITE    ITE      CH SITE  ITE      SITE     K SITE   NSEL ISL BOUR     OINT     ORDON BAILET     TE                 TOTAL
         TOT PCT I       1I       2I       3I       4I       5I       6I       7I       8I       9I      10I      11I      12I      13I
REP      --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               8 I      1 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      3
WALRUS TUSKS     I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   33.3 I    1.4
                 I    1.8 I    0.0 I    0.0 I    0.0 I    0.0 I    7.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               9 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      1
COMPLETE OWL     I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I     .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              10 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      1
COMPLETE GOOSE   I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I     .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              11 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1
GOOSE HEAD       I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    6.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              12 I      2 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      3
COMPLETE WHALE   I   66.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   33.3 I    1.4
                 I    3.6 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              13 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      1
COMPLETE FALCON  I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I     .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              14 I      3 I      3 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      4 I     10
MINI HARPOON HEA I   30.0 I   30.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   40.0 I    4.7
                 I    5.5 I   42.9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    5.5 I
                 I    1.4 I    1.4 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.9 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
          COLUMN       55        7        2        6       15       13       27        1       10        1        1        4       73      215
           TOTAL     25.6      3.3       .9      2.8      7.0      6.0     12.6       .5      4.7       .5       .5      1.9     34.0    100.0
(CONTINUED)
```

TABLE I (cont.)

```
                   SITE                                                                                      SITE
           COUNT  I                                                                                          :
         ROW PCT IALARNERK BIRKET S HALL BEA ROWLEY S KAERSUT  JENS MUN COATS MA LAKE HAR BUTTON P ANDREW G :CLYDE IN TYARA SI IGLOOLIK      ROW
         COL PCT I SITE    ITE      CH SITE  ITE      SITE     K SITE   NSEL ISL BOUR     OINT     ORDON BA :LET      TE                   TOTAL
         TOT PCT I       1I       2I       3I       4I       5I       6I       7I       8I       9I      10I      11I      12I      13I
REP      --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              15 I      4 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      1 I      0 I      0 I      0 I      2 I      8
FULL HARPOON HEA I   50.0 I    0.0 I    0.0 I    0.0 I    0.0 I   12.5 I    0.0 I    0.0 I   12.5 I    0.0 I    0.0 I    0.0 I   25.0 I    3.7
                 I    7.3 I    0.0 I    0.0 I    0.0 I    0.0 I    7.7 I    0.0 I    0.0 I   10.0 I    0.0 I    0.0 I    0.0 I    2.7 I
                 I    1.9 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I     .9 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              16 I      1 I      0 I      0 I      0 I      1 I      2 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      4
*SHAMAN*S* TEETH I   25.0 I    0.0 I    0.0 I    0.0 I   25.0 I   50.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.9
                 I    1.8 I    0.0 I    0.0 I    0.0 I    6.7 I   15.4 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 I     .5 I    0.0 I    0.0 I    0.0 I     .5 I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              17 I      0 I      0 I      0 I      0 I      2 I      0 I      2 I      0 I      0 I      0 I      0 I      0 I      9 I     13
PADDLE SHAPED OB I    0.0 I    0.0 I    0.0 I    0.0 I   15.4 I    0.0 I   15.4 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   69.2 I    6.0
                 I    0.0 I    0.0 I    0.0 I    0.0 I   13.3 I    0.0 I    7.4 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   12.3 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I     .9 I    0.0 I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    4.2 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              18 I      5 I      0 I      0 I      0 I      1 I      1 I      1 I      0 I      0 I      0 I      0 I      1 I      2 I     11
TUBE             I   45.5 I    0.0 I    0.0 I    0.0 I    9.1 I    9.1 I    9.1 I    0.0 I    0.0 I    0.0 I    0.0 I    9.1 I   18.2 I    5.1
                 I    9.1 I    0.0 I    0.0 I    0.0 I    6.7 I    7.7 I    3.7 I    0.0 I    0.0 I    0.0 I    0.0 I   25.0 I    2.7 I
                 I    2.3 I    0.0 I    0.0 I    0.0 I     .5 I     .5 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I     .9 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              19 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      1
WEASEL           I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I     .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              20 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1
CARIBOU          I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5
                 I    1.8 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              21 I      2 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      3
CARIBOU HOOF     I   66.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4
                 I    3.6 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    3.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
          COLUMN       55        7        2        6       15       13       27        1       10        1        1        4       73      215
           TOTAL     25.6      3.3       .9      2.8      7.0      6.0     12.6       .5      4.7       .5       .5      1.9     34.0    100.0
(CONTINUED)
```

TABLE I (cont.)

```
                    SITE                                                                                     SITE
         COUNT    I
         ROW PCT  IALARNERK BIRKET S HALL BEA ROWLEY S KAERSUT  JENS MUN COATS HA LAKE HAR BUTTON P ANDREW G CLYDE IN TYARA SI IGLOOLIK   ROW
         COL PCT  I SITE    ITE      CH SITE  ITE      SITE     K SITE   NSEL ISL BOUR     OINT     ORDON BA LET      TE                  TOTAL
         TOT PCT  I       1I       2I       3I       4I       5I       6I       7I       8I       9I      10I      11I      12I      13I
REP       --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               22 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1
  CARIBOU HEAD    I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5
                  I    1.8 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                  I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               23 I     12 I      2 I      0 I      1 I      3 I      3 I      9 I      0 I      0 I      0 I      0 I      0 I      5 I     35
  THIN DISC       I   34.3 I    5.7 I    0.0 I    2.9 I    8.6 I    8.6 I   25.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   14.3 I   16.3
                  I   21.8 I   28.6 I    0.0 I   16.7 I   20.0 I   23.1 I   33.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    6.8 I
                  I    5.6 I     .9 I    0.0 I     .5 I    1.4 I    1.4 I    4.2 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.3 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               24 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1
  LANCE BLADE     I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5
                  I    1.8 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                  I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               25 I      9 I      1 I      2 I      2 I      3 I      3 I     11 I      0 I      0 I      0 I      0 I      0 I     21 I     52
  ANTLER SEC TUBE I   17.3 I    1.9 I    3.8 I    3.8 I    5.8 I    5.8 I   21.2 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   40.4 I   24.2
                  I   16.4 I   14.3 I  100.0 I   33.3 I   20.0 I   23.1 I   40.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   28.8 I
                  I    4.2 I     .5 I     .9 I     .9 I    1.4 I    1.4 I    5.1 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    9.8 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               26 I      1 I      0 I      0 I      0 I      2 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      3
  TOOTH           I   33.3 I    0.0 I    0.0 I    0.0 I   66.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4
                  I    1.8 I    0.0 I    0.0 I    0.0 I   13.3 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                  I     .5 I    0.0 I    0.0 I    0.0 I     .9 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               27 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1
  DOG             I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5
                  I    0.0 I    0.0 I    0.0 I   16.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                  I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               28 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      1
  OPPOSING BEAR HE I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I     .5
                  I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I
                  I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
           COLUMN      55        7        2        6       15       13       27        1       10        1        1        4       73        215
            TOTAL    25.6      3.3       .9      2.8      7.0      6.0     12.6       .5      4.7       .5       .5      1.9     34.0      100.0
(CONTINUED)
```

TABLE I (cont.)

```
                  SITE                                                                                         SITE
           COUNT I
         ROW PCT IALARNERK BIRKET S HALL BEA ROWLEY S KAERSUT  JENS MUN COATS MA LAKE HAR BUTTON P ANDREW G CLYDE IN TYARA SI IGLOOLIK     ROW
         COL PCT I SITE    ITE      CH SITE  ITE      SITE     K SITE   NSEL ISL BOUR     OINT     ORDON BA LET      TE                  TOTAL
         TOT PCT I       1I       2I       3I       4I       5I       6I       7I       8I       9I      10I      11I      12I      13I
REP      --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              29 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I       1
BEAR HEADS 1 THO I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I      .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   25.0 I    0.0 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              30 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I       1
BEAR HEADS 2 THO I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I      .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   10.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              31 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I       1
OPPOS WALRUS HEA I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I      .5
                 I    0.0 I    0.0 I    0.0 I   16.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              32 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I       1
OPP CARIBOU-BEAR I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I      .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              33 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I       1
WEASEL HDS 1 THO I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I      .5
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.4 I
                 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
           COLUMN       55        7        2        6       15       13       27        1       10        1        1        4       73      215
            TOTAL     25.6      3.3       .9      2.8      7.0      6.0     12.6       .5      4.7       .5       .5      1.9     34.0    100.0
(CONTINUED)
                                                                                  NUMBER OF MISSING OBSERVATIONS =      35
```

TABLE II

CROSSTABULATION OF ARTIFACT REPRESENTATION BY SITES WITH LARGEST FREQUENCIES OF ARTIFACTS

```
                  REP
           COUNT  I
         ROW PCT  ICOMPLETE HUMAN MA COMPLETE BEAR HEA COMPLETE COMPLETE WALRUS H WALRUS T COMPLETE GOOSE HE   ROW
         COL PCT  I HUMAN   SK-MASKE BEAR     D         SEAL    WALRUS   EAD      USKS     OWL      AD        TOTAL
         TOT PCT  I       1I       2I       3I       4I       5I       6I       7I       8I       9I      11I
SITE     ---------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               1  I      1 I      2 I      1 I      1 I      4 I      1 I      2 I      1 I      0 I      0 I    55
  ALARNERK SITE   I    1.8 I    3.6 I    1.8 I    1.8 I    7.3 I    1.8 I    3.6 I    1.8 I    0.0 I    0.0 I  28.5
                  I   16.7 I   22.2 I   11.1 I   50.0 I   26.7 I   33.3 I   33.3 I   33.3 I    0.0 I    0.0 I
                  I     .5 I    1.0 I     .5 I     .5 I    2.1 I     .5 I    1.0 I     .5 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               5  I      0 I      0 I      1 I      0 I      1 I      0 I      0 I      0 I      0 I      1 I    15
  KAERSUT SITE    I    0.0 I    0.0 I    6.7 I    0.0 I    6.7 I    0.0 I    0.0 I    0.0 I    0.0 I    6.7 I   7.8
                  I    0.0 I    0.0 I   11.1 I    0.0 I    6.7 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I
                  I    0.0 I    0.0 I     .5 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               6  I      0 I      1 I      1 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I    13
  JENS MUNK SITE  I    0.0 I    7.7 I    7.7 I    0.0 I    0.0 I    0.0 I    0.0 I    7.7 I    0.0 I    0.0 I   6.7
                  I    0.0 I   11.1 I   11.1 I    0.0 I    0.0 I    0.0 I    0.0 I   33.3 I    0.0 I    0.0 I
                  I    0.0 I     .5 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               7  I      1 I      1 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I    27
  COATS MANSEL ISLI    3.7 I    3.7 I    3.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  14.0
                  I   16.7 I   11.1 I   11.1 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                  I     .5 I     .5 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
               9  I      2 I      4 I      1 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I    10
  BUTTON POINT    I   20.0 I   40.0 I   10.0 I    0.0 I   10.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   5.2
                  I   33.3 I   44.4 I   11.1 I    0.0 I    6.7 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                  I    1.0 I    2.1 I     .5 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              13  I      2 I      1 I      4 I      1 I      9 I      2 I      4 I      1 I      1 I      0 I    73
  IGLOOLIK        I    2.7 I    1.4 I    5.5 I    1.4 I   12.3 I    2.7 I    5.5 I    1.4 I    1.4 I    0.0 I  37.8
                  I   33.3 I   11.1 I   44.4 I   50.0 I   60.0 I   66.7 I   66.7 I   33.3 I  100.0 I    0.0 I
                  I    1.0 I     .5 I    2.1 I     .5 I    4.7 I    1.0 I    2.1 I     .5 I     .5 I    0.0 I
                 -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
          COLUMN         6        9        9        2       15        3        6        3        1        1     193
           TOTAL       3.1      4.7      4.7      1.0      7.8      1.6      3.1      1.6       .5       .5   100.0
(CONTINUED)
```

TABLE II (cont.)

```
                     REP
              COUNT I
            ROW PCT ICOMPLETE COMPLETE MINI HAR FULL HAR ≠SHAMAN≠ PADDLE S TUBE      WEASEL    CARIBOU   CARIBOU     ROW
            COL PCT I WHALE    FALCON   POON HEA POON HEA S≠ TEETH HAPED OB                              HOOF        TOTAL
            TOT PCT I      12I      13I      14I      15I      16I      17I      18I      19I      20I      21I
SITE        --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  1 I      2 I      0 I      3 I      4 I      1 I      0 I      5 I      0 I      1 I      2 I     55
  ALARNERK SITE     I    3.6 I    0.0 I    5.5 I    7.3 I    1.8 I    0.0 I    9.1 I    0.0 I    1.8 I    3.6 I   28.5
                    I   66.7 I    0.0 I   42.9 I   50.0 I   25.0 I    0.0 I   50.0 I    0.0 I  100.0 I   66.7 I
                    I    1.0 I    0.0 I    1.6 I    2.1 I     .5 I    0.0 I    2.6 I    0.0 I     .5 I    1.0 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  5 I      0 I      0 I      0 I      0 I      1 I      2 I      1 I      0 I      0 I      0 I     15
  KAERSUT SITE      I    0.0 I    0.0 I    0.0 I    0.0 I    6.7 I   13.3 I    6.7 I    0.0 I    0.0 I    0.0 I    7.8
                    I    0.0 I    0.0 I    0.0 I    0.0 I   25.0 I   15.4 I   10.0 I    0.0 I    0.0 I    0.0 I
                    I    0.0 I    0.0 I    0.0 I    0.0 I     .5 I    1.0 I     .5 I    0.0 I    0.0 I    0.0 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  6 I      0 I      0 I      0 I      1 I      2 I      0 I      1 I      0 I      0 I      0 I     13
  JENS MUNK SITE    I    0.0 I    0.0 I    0.0 I    7.7 I   15.4 I    0.0 I    7.7 I    0.0 I    0.0 I    0.0 I    6.7
                    I    0.0 I    0.0 I    0.0 I   12.5 I   50.0 I    0.0 I   10.0 I    0.0 I    0.0 I    0.0 I
                    I    0.0 I    0.0 I    0.0 I     .5 I    1.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  7 I      0 I      0 I      0 I      0 I      0 I      2 I      1 I      0 I      0 I      1 I     27
  COATS MANSEL ISL  I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    7.4 I    3.7 I    0.0 I    0.0 I    3.7 I   14.0
                    I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   15.4 I   10.0 I    0.0 I    0.0 I   33.3 I
                    I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    1.0 I     .5 I    0.0 I    0.0 I     .5 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                  9 I      0 I      0 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I     10
  BUTTON POINT      I    0.0 I    0.0 I    0.0 I   10.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    5.2
                    I    0.0 I    0.0 I    0.0 I   12.5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                    I    0.0 I    0.0 I    0.0 I     .5 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
                 13 I      1 I      1 I      4 I      2 I      0 I      9 I      2 I      1 I      0 I      0 I     73
  IGLOOLIK          I    1.4 I    1.4 I    5.5 I    2.7 I    0.0 I   12.3 I    2.7 I    1.4 I    0.0 I    0.0 I   37.8
                    I   33.3 I  100.0 I   57.1 I   25.0 I    0.0 I   69.2 I   20.0 I  100.0 I    0.0 I    0.0 I
                    I     .5 I     .5 I    2.1 I    1.0 I    0.0 I    4.7 I    1.0 I     .5 I    0.0 I    0.0 I
                   -I--------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             COLUMN        3        1        7        8        4       13       10        1        1        3      193
              TOTAL      1.6       .5      3.6      4.1      2.1      6.7      5.2       .5       .5      1.6    100.0
(CONTINUED)
```

TABLE II (cont.)

```
                  REP
          COUNT  I
        ROW PCT ICARIBOU  THIN DIS LANCE BL ANTLER S TOOTH     BEAR HEA OPP CARI WEASEL H   ROW
        COL PCT IHEAD     C        ADE      EC TUBE            DS 2 THO BOU-BEAR DS 1 THO  TOTAL
        TOT PCT I      22I      23I      24I      25I      26I      30I      32I      33I
SITE    --------I--------I--------I--------I--------I--------I--------I--------I--------I
              1 I     1  I    12  I     1  I     9  I     1  I     0  I     0  I     0  I    55
  ALARNERK SITE I   1.8  I  21.8  I   1.8  I  16.4  I   1.8  I   0.0  I   0.0  I   0.0  I  28.5
                I 100.0  I  37.5  I 100.0  I  19.1  I  33.3  I   0.0  I   0.0  I   0.0  I
                I    .5  I   6.2  I    .5  I   4.7  I    .5  I   0.0  I   0.0  I   0.0  I
               -I--------I--------I--------I--------I--------I--------I--------I--------I
              5 I     0  I     3  I     0  I     3  I     2  I     0  I     0  I     0  I    15
  KAERSUT SITE  I   0.0  I  20.0  I   0.0  I  20.0  I  13.3  I   0.0  I   0.0  I   0.0  I   7.8
                I   0.0  I   9.4  I   0.0  I   6.4  I  66.7  I   0.0  I   0.0  I   0.0  I
                I   0.0  I   1.6  I   0.0  I   1.6  I   1.0  I   0.0  I   0.0  I   0.0  I
               -I--------I--------I--------I--------I--------I--------I--------I--------I
              6 I     0  I     3  I     0  I     3  I     0  I     0  I     0  I     0  I    13
  JENS MUNK SITE I  0.0  I  23.1  I   0.0  I  23.1  I   0.0  I   0.0  I   0.0  I   0.0  I   6.7
                I   0.0  I   9.4  I   0.0  I   6.4  I   0.0  I   0.0  I   0.0  I   0.0  I
                I   0.0  I   1.6  I   0.0  I   1.6  I   0.0  I   0.0  I   0.0  I   0.0  I
               -I--------I--------I--------I--------I--------I--------I--------I--------I
              7 I     0  I     9  I     0  I    11  I     0  I     0  I     0  I     0  I    27
  COATS MANSEL ISL I 0.0 I  33.3  I   0.0  I  40.7  I   0.0  I   0.0  I   0.0  I   0.0  I  14.0
                I   0.0  I  28.1  I   0.0  I  23.4  I   0.0  I   0.0  I   0.0  I   0.0  I
                I   0.0  I   4.7  I   0.0  I   5.7  I   0.0  I   0.0  I   0.0  I   0.0  I
               -I--------I--------I--------I--------I--------I--------I--------I--------I
              9 I     0  I     0  I     0  I     0  I     0  I     1  I     0  I     0  I    10
  BUTTON POINT  I   0.0  I   0.0  I   0.0  I   0.0  I   0.0  I  10.0  I   0.0  I   0.0  I   5.2
                I   0.0  I   0.0  I   0.0  I   0.0  I   0.0  I 100.0  I   0.0  I   0.0  I
                I   0.0  I   0.0  I   0.0  I   0.0  I   0.0  I    .5  I   0.0  I   0.0  I
               -I--------I--------I--------I--------I--------I--------I--------I--------I
             13 I     0  I     5  I     0  I    21  I     0  I     0  I     1  I     1  I    73
  IGLOOLIK      I   0.0  I   6.8  I   0.0  I  28.8  I   0.0  I   0.0  I   1.4  I   1.4  I  37.8
                I   0.0  I  15.6  I   0.0  I  44.7  I   0.0  I   0.0  I 100.0  I 100.0  I
                I   0.0  I   2.6  I   0.0  I  10.9  I   0.0  I   0.0  I    .5  I    .5  I
               -I--------I--------I--------I--------I--------I--------I--------I--------I
         COLUMN       1       32        1       47        3        1        1        1      193
          TOTAL      .5     16.6       .5     24.4      1.6       .5       .5       .5    100.0

NUMBER OF MISSING OBSERVATIONS =      29
```

TABLE III

CROSSTABULATION OF COLLAPSED ARTIFACT REPRESENTATION CATEGORIES BY SITES

```
                     REP
           COUNT    I
           ROW PCT  IHUMAN     SEA       LAND MAM BIRD       DECORAT  MINIAT      ROW
           COL PCT  I          MAMMALS   MAL                 IMPLIMEN IMPLIMEN    TOTAL
           TOT PCT  I       34.I      40.I      51.I      52.I      53.I      54.I
SITE       ---------I---------I---------I---------I---------I---------I---------I
                1.  I      3  I     10  I      6  I      0  I     33  I      3  I     55
  ALAFNERK SITE     I    5.5  I   18.2  I   10.9  I      0  I   60.0  I    5.5  I   25.6
                    I   20.0  I   31.3  I   22.2  I      0  I   26.0  I   30.0  I
                    I    1.4  I    4.7  I    2.8  I      0  I   15.3  I    1.4  I
                   -I---------I---------I---------I---------I---------I---------I
                2.  I      0  I      1  I      0  I      0  I      3  I      3  I      7
  BIRKET SITE       I      0  I   14.3  I      0  I      0  I   42.9  I   42.9  I    3.3
                    I      0  I    3.1  I      0  I      0  I    2.4  I   30.0  I
                    I      0  I     .5  I      0  I      0  I    1.4  I    1.4  I
                   -I---------I---------I---------I---------I---------I---------I
                3.  I      0  I      0  I      0  I      0  I      2  I      0  I      2
  HALL BEACH SITE   I      0  I      0  I      0  I      0  I  100.0  I      0  I     .9
                    I      0  I      0  I      0  I      0  I    1.6  I      0  I
                    I      0  I      0  I      0  I      0  I     .9  I      0  I
                   -I---------I---------I---------I---------I---------I---------I
                4.  I      0  I      1  I      2  I      0  I      3  I      0  I      6
  ROWLEY SITE       I      0  I   16.7  I   33.3  I      0  I   50.0  I      0  I    2.8
                    I      0  I    3.1  I    7.4  I      0  I    2.4  I      0  I
                    I      0  I     .5  I     .9  I      0  I    1.4  I      0  I
                   -I---------I---------I---------I---------I---------I---------I
                5.  I      0  I      1  I      1  I      1  I     12  I      0  I     15
  KAERSUT SITE      I      0  I    6.7  I    6.7  I    6.7  I   80.0  I      0  I    7.0
                    I      0  I    3.1  I    3.7  I   25.0  I    9.4  I      0  I
                    I      0  I     .5  I     .5  I     .5  I    5.6  I      0  I
                   -I---------I---------I---------I---------I---------I---------I
                6.  I      1  I      1  I      1  I      0  I     10  I      0  I     13
  JENS MUNK SITE    I    7.7  I    7.7  I    7.7  I      0  I   76.9  I      0  I    6.0
                    I    6.7  I    3.1  I    3.7  I      0  I    7.9  I      0  I
                    I     .5  I     .5  I     .5  I      0  I    4.7  I      0  I
                   -I---------I---------I---------I---------I---------I---------I
                7.  I      2  I      0  I      2  I      0  I     23  I      0  I     27
  COATS MANSEL ISL  I    7.4  I      0  I    7.4  I      0  I   85.2  I      0  I   12.6
                    I   13.3  I      0  I    7.4  I      0  I   18.1  I      0  I
                    I     .9  I      0  I     .9  I      0  I   10.7  I      0  I
                   -I---------I---------I---------I---------I---------I---------I
          COLUMN           15        32        27         4       127        10       215
           TOTAL          7.0      14.9      12.6       1.9      59.1       4.7     100.0
(CONTINUED)
```

TABLE III (cont.)

```
                  REP
          COUNT   I
         ROW PCT  IHUMAN     SEA       LAND MAM BIRD       DECORAT  MINIAT     ROW
         COL PCT  I          MAMMALS   MAL                 IMPLIMEN IMPLIMEN   TOTAL
         TOT PCT  I      34.I      40.I      51.I      52.I      53.I      54.I
SITE     ---------I---------I---------I---------I---------I---------I---------I
              8.  I       0 I       0 I       1 I       0 I       0 I       0 I       1
  LAKE HARBOUR    I       0 I       0 I 100.0   I       0 I       0 I       0 I      .5
                  I       0 I       0 I     3.7 I       0 I       0 I       0 I
                  I       0 I       0 I      .5 I       0 I       0 I       0 I
                 -I---------I---------I---------I---------I---------I---------I
              9.  I       6 I       1 I       2 I       0 I       1 I       0 I      10
  BUTTON POINT    I    60.0 I    10.0 I    20.0 I       0 I    10.0 I       0 I     4.7
                  I    40.0 I     3.1 I     7.4 I       0 I      .8 I       0 I
                  I     2.8 I      .5 I      .9 I       0 I      .5 I       0 I
                 -I---------I---------I---------I---------I---------I---------I
             10.  I       0 I       0 I       1 I       0 I       0 I       0 I       1
  ANDREW GORDON BA I      0 I       0 I 100.0   I       0 I       0 I       0 I      .5
                  I       0 I       0 I     3.7 I       0 I       0 I       0 I
                  I       0 I       0 I      .5 I       0 I       0 I       0 I
                 -I---------I---------I---------I---------I---------I---------I
             11.  I       0 I       0 I       0 I       1 I       0 I       0 I       1
  CLYDE INLET     I       0 I       0 I       0 I 100.0   I       0 I       0 I      .5
                  I       0 I       0 I       0 I    25.0 I       0 I       0 I
                  I       0 I       0 I       0 I      .5 I       0 I       0 I
                 -I---------I---------I---------I---------I---------I---------I
             12.  I       0 I       0 I       3 I       0 I       1 I       0 I       4
  TYARA SITE      I       0 I       0 I    75.0 I       0 I    25.0 I       0 I     1.9
                  I       0 I       0 I    11.1 I       0 I      .8 I       0 I
                  I       0 I       0 I     1.4 I       0 I      .5 I       0 I
                 -I---------I---------I---------I---------I---------I---------I
             13.  I       3 I      17 I       8 I       2 I      39 I       4 I      73
  IGLOOLIK        I     4.1 I    23.3 I    11.0 I     2.7 I    53.4 I     5.5 I    34.0
                  I    20.0 I    53.1 I    29.6 I    50.0 I    30.7 I    40.0 I
                  I     1.4 I     7.9 I     3.7 I      .9 I    18.1 I     1.9 I
                 -I---------I---------I---------I---------I---------I---------I
         COLUMN          15        32        27         4       127        10       215
          TOTAL         7.0      14.9      12.6       1.9      59.1       4.7     100.0

NUMBER OF MISSING OBSERVATIONS =       35
```

TABLE IV

CROSSTABULATION OF COLLAPSED ARTIFACT REPRESENTATION CATEGORIES BY COLLAPSED SITE CATEGORIES

```
                          REP
                  COUNT   I
                  ROW PCT IHUMAN     SEA       LAND MAM BIRD      DECORAT  MINIAT     ROW
                  COL PCT I          MAMMALS   MAL                IMPLIMEN IMPLIMEN   TOTAL
                  TOT PCT I     34.I     40.I     51.I      52.I      53.I      54.I
SITE              --------I--------I--------I--------I--------I--------I--------I
                      15. I      0 I      0 I      5 I      0 I      1 I      0 I      6
  HUDSON STRAIT           I      0 I      0 I   83.3 I      0 I   16.7 I      0 I    2.8
                          I      0 I      0 I   18.5 I      0 I     .8 I      0 I
                          I      0 I      0 I    2.3 I      0 I     .5 I      0 I
                         -I--------I--------I--------I--------I--------I--------I
                      16. I      6 I      1 I      2 I      1 I      1 I      0 I     11
  EAST BAFFIN             I   54.5 I    9.1 I   18.2 I    9.1 I    9.1 I      0 I    5.1
                          I   40.0 I    3.1 I    7.4 I   25.0 I     .8 I      0 I
                          I    2.8 I     .5 I     .9 I     .5 I     .5 I      0 I
                         -I--------I--------I--------I--------I--------I--------I
                      17. I      9 I     31 I     20 I      3 I    125 I     10 I    198
  HUDSON BAY              I    4.5 I   15.7 I   10.1 I    1.5 I   63.1 I    5.1 I   92.1
                          I   60.0 I   96.9 I   74.1 I   75.0 I   98.4 I  100.0 I
                          I    4.2 I   14.4 I    9.3 I    1.4 I   58.1 I    4.7 I
                         -I--------I--------I--------I--------I--------I--------I
                  COLUMN        15       32       27         4      127       10      215
                   TOTAL       7.0     14.9     12.6       1.9     59.1      4.7    100.0

RAW CHI SQUARE =     75.37363 WITH    10 DEGREES OF FREEDOM.  SIGNIFICANCE =    .0000
CRAMER≠S V =      .41867
CONTINGENCY COEFFICIENT =      .50948
NUMBER OF MISSING OBSERVATIONS =      35
```

TABLE V

CROSSTABULATION OF COLLAPSED ARTIFACT REPRESENTATION CATEGORIES BY TWO COLLAPSED SITE CATEGORIES

```
                          REP
                  COUNT   I
                  ROW PCT IHUMAN     SEA       LAND MAM EIRD      DECORAT  MINIAT     ROW
                  COL PCT I          MAMMALS   MAL                IMPLIMEN IMPLIMEN   TOTAL
                  TOT PCT I     34.I     40.I     51.I      52.I      53.I      54.I
SITE              --------I--------I--------I--------I--------I--------I--------I
                      17. I      9 I     31 I     20 I      3 I    125 I     10 I    198
  HUDSON BAY              I    4.5 I   15.7 I   10.1 I    1.5 I   63.1 I    5.1 I   92.1
                          I   60.0 I   96.9 I   74.1 I   75.0 I   98.4 I  100.0 I
                          I    4.2 I   14.4 I    9.3 I    1.4 I   58.1 I    4.7 I
                         -I--------I--------I--------I--------I--------I--------I
                      20. I      6 I      1 I      7 I      1 I      2 I      0 I     17
  OTHER                   I   35.3 I    5.9 I   41.2 I    5.9 I   11.8 I      0 I    7.9
                          I   40.0 I    3.1 I   25.9 I   25.0 I    1.6 I      0 I
                          I    2.8 I     .5 I    3.3 I     .5 I     .9 I      0 I
                         -I--------I--------I--------I--------I--------I--------I
                  COLUMN        15       32       27         4      127       10      215
                   TOTAL       7.0     14.9     12.6       1.9     59.1      4.7    100.0

RAW CHI SQUARE =     43.71702 WITH     5 DEGREES OF FREEDOM.  SIGNIFICANCE =    .0000
CRAMER≠S V =      .45093
CONTINGENCY COEFFICIENT =      .41107
NUMBER OF MISSING OBSERVATIONS =      35
```

TABLE VI

CROSSTABULATION OF COLLAPSED ARTIFACT REPRESENTATION CATEGORIES OMITTING DECORATED IMPLEMENTS BY COLLAPSED SITE CATEGORIES

```
                 REP
          COUNT I
        ROW PCT IHUMAN    SEA      LAND MAM MINIAT    ROW
        COL PCT I         MAMMALS  MAL      IMPLIMEN  TOTAL
        TOT PCT I     34.I     40.I     51.I     54.I
SITE    --------I--------I--------I--------I--------I
            15. I      0 I      0 I      5 I      0 I      5
  HUDSON STRAIT I      0 I      0 I  100.0 I      0 I    6.0
                I      0 I      0 I   18.5 I      0 I
                I      0 I      0 I    6.0 I      0 I
               -I--------I--------I--------I--------I
            16. I      6 I      1 I      2 I      0 I      9
  EAST BAFFIN   I   66.7 I   11.1 I   22.2 I      0 I   10.7
                I   40.0 I    3.1 I    7.4 I      0 I
                I    7.1 I    1.2 I    2.4 I      0 I
               -I--------I--------I--------I--------I
            17. I      9 I     31 I     20 I     10 I     70
  HUDSON BAY    I   12.9 I   44.3 I   28.6 I   14.3 I   83.3
                I   60.0 I   96.9 I   74.1 I  100.0 I
                I   10.7 I   36.9 I   23.8 I   11.9 I
               -I--------I--------I--------I--------I
         COLUMN       15       32       27       10       84
          TOTAL     17.9     38.1     32.1     11.9    100.0

RAW CHI SQUARE =     27.92522 WITH     6 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0001
CRAMER≠S V =      .40770
CONTINGENCY COEFFICIENT =      .49950
NUMBER CF MISSING OBSERVATIONS =        34
```

TABLE VII

CROSSTABULATION OF COLLAPSED ARTIFACT REPRESENTATION CATEGORIES OMITTING DECORATED IMPLEMENTS BY TWO COLLAPSED SITE CATEGORIES

```
                 REP
          COUNT I
        ROW PCT IHUMAN    SEA      LAND MAM MINIAT    ROW
        COL PCT I         MAMMALS  MAL      IMPLIMEN  TOTAL
        TOT PCT I     34.I     40.I     51.I     54.I
SITE    --------I--------I--------I--------I--------I
            17. I      9 I     31 I     20 I     10 I     70
  HUDSON BAY    I   12.9 I   44.3 I   28.6 I   14.3 I   83.3
                I   60.0 I   96.9 I   74.1 I  100.0 I
                I   10.7 I   36.9 I   23.8 I   11.9 I
               -I--------I--------I--------I--------I
            20. I      6 I      1 I      7 I      0 I     14
  OTHER         I   42.9 I    7.1 I   50.0 I      0 I   16.7
                I   40.0 I    3.1 I   25.9 I      0 I
                I    7.1 I    1.2 I    8.3 I      0 I
               -I--------I--------I--------I--------I
         COLUMN       15       32       27       10       84
          TOTAL     17.9     38.1     32.1     11.9    100.0

RAW CHI SQUARE =     13.77167 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0032
CRAMER≠S V =      .40491
CONTINGENCY COEFFICIENT =      .37531
NUMBER CF MISSING OBSERVATIONS =        34
```

TABLE VIII

CROSSTABULATION OF TWO ARTIFACT REPRESENTATIONS BY TWO REGIONS

```
                  SITE
         COUNT   I
         ROW PCT I                        ROW
         COL PCT IIgloolik     other      TOTAL
         TOT PCT I        41I       42I
REP      --------I---------I---------I
              39 I   140   I    43   I   183
  NON SEA  MAMMALS I  76.5   I  23.5   I  85.1
                 I  81.9   I  97.7   I
                 I  65.1   I  20.0   I
                -I---------I---------I
              40 I    31   I     1   I    32
  SEA     MAMMALS I  96.9   I   3.1   I  14.9
                 I  18.1   I   2.3   I
                 I  14.4   I    .5   I
                -I---------I---------I
         COLUMN      171        44       215
          TOTAL      79.5      20.5     100.0

CORRECTED CHI SQUARE =     5.74974 WITH 1 DEGREE OF FREEDOM.  SIGNIFICANCE =   .0165
PHI =      .17973
CONTINGENCY COEFFICIENT =      .17689
NUMBER OF MISSING OBSERVATIONS =      35
```

TABLE IX

CROSSTABULATION OF SITE BY SPINE REPRESENTATION

```
                  VAR100
          COUNT  I
         ROW PCT I                                            ROW
         COL PCT I                                            TOTAL
         TOT PCT I   15.00I    16.00I    17.00I    18.00I
SITE     --------I---------I---------I---------I---------I
               1 I     3   I     0   I     1   I     1   I     5
  ALARNERK SITE  I  60.0   I   0.0   I  20.0   I  20.0   I  17.9
                 I  13.6   I   0.0   I  50.0   I  50.0   I
                 I  10.7   I   0.0   I   3.6   I   3.6   I
                -I---------I---------I---------I---------I
               5 I     0   I     0   I     0   I     1   I     1
  KAERSUT SITE   I   0.0   I   0.0   I   0.0   I 100.0   I   3.6
                 I   0.0   I   0.0   I   0.0   I  50.0   I
                 I   0.0   I   0.0   I   0.0   I   3.6   I
                -I---------I---------I---------I---------I
               8 I     1   I     0   I     0   I     0   I     1
  LAKE HARBOUR   I 100.0   I   0.0   I   0.0   I   0.0   I   3.6
                 I   4.5   I   0.0   I   0.0   I   0.0   I
                 I   3.6   I   0.0   I   0.0   I   0.0   I
                -I---------I---------I---------I---------I
               9 I     8   I     0   I     0   I     0   I     8
  BUTTON POINT   I 100.0   I   0.0   I   0.0   I   0.0   I  28.6
                 I  36.4   I   0.0   I   0.0   I   0.0   I
                 I  28.6   I   0.0   I   0.0   I   0.0   I
                -I---------I---------I---------I---------I
              12 I     0   I     1   I     0   I     0   I     1
  TYARA SITE     I   0.0   I 100.0   I   0.0   I   0.0   I   3.6
                 I   0.0   I  50.0   I   0.0   I   0.0   I
                 I   0.0   I   3.6   I   0.0   I   0.0   I
                -I---------I---------I---------I---------I
              13 I    10   I     1   I     1   I     0   I    12
  IGLOOLIK       I  83.3   I   8.3   I   8.3   I   0.0   I  42.9
                 I  45.5   I  50.0   I  50.0   I   0.0   I
                 I  35.7   I   3.6   I   3.6   I   0.0   I
                -I---------I---------I---------I---------I
          COLUMN      22         2         2         2       28
           TOTAL     78.6       7.1       7.1       7.1    100.0

RAW CHI SQUARE =    32.28485 WITH    15 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0059
CRAMER≠S V =      .61995
CONTINGENCY COEFFICIENT =      .73180
NUMBER OF MISSING OBSERVATIONS =       2
```

TABLE X

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY SPINE REPRESENTATIONS

```
                         VAR100
                  COUNT  I
                ROW PCT  I                                           ROW
                COL PCT  I                                           TOTAL
                TOT PCT  I    15.00I    16.00I    17.00I    18.00I
SITE            ---------I---------I---------I---------I---------I
                     13. I      10 I       1 I       1 I       0 I      12
  IGLCOLIK               I    83.3 I     8.3 I     8.3 I       0 I    42.9
                         I    45.5 I    50.0 I    50.0 I       0 I
                         I    35.7 I     3.6 I     3.6 I       0 I
                        -I---------I---------I---------I---------I
                     14. I       3 I       0 I       1 I       2 I       6
  IGLOOLIK AREA          I    50.0 I       0 I    16.7 I    33.3 I    21.4
                         I    13.6 I       0 I    50.0 I   100.0 I
                         I    10.7 I       0 I     3.6 I     7.1 I
                        -I---------I---------I---------I---------I
                     15. I       1 I       1 I       0 I       0 I       2
  HUDSON STRAIT          I    50.0 I    50.0 I       0 I       0 I     7.1
                         I     4.5 I    50.0 I       0 I       0 I
                         I     3.6 I     3.6 I       0 I       0 I
                        -I---------I---------I---------I---------I
                     16. I       8 I       0 I       0 I       0 I       8
  EAST BAFFIN            I   100.0 I       0 I       0 I       0 I    28.6
                         I    36.4 I       0 I       0 I       0 I
                         I    28.6 I       0 I       0 I       0 I
                        -I---------I---------I---------I---------I
                 COLUMN         22          2         2         2        28
                  TOTAL       78.6        7.1       7.1       7.1     100.0

RAW CHI SQUARE =     16.33333 WITH     9 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0602
CRAMER≠S V =      .44096
CONTINGENCY COEFFICIENT =      .60698
NUMBER OF MISSING OBSERVATIONS =      215
```

TABLE XI

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY TWO COLLAPSED SPINE REPRESENTATION CATEGORIES

```
                         VAR100
                  COUNT  I
                ROW PCT  I                       ROW
                COL PCT  I                       TOTAL
                TOT PCT  I   ORNA   I   PLAI   I
SITE            ---------I---------I---------I
                     13. I       1 I      11 I      12
  IGLOOLIK               I     8.3 I    91.7 I    42.9
                         I    25.0 I    45.8 I
                         I     3.6 I    39.3 I
                        -I---------I---------I
                     14. I       3 I       3 I       6
  IGLOOLIK AREA          I    50.0 I    50.0 I    21.4
                         I    75.0 I    12.5 I
                         I    10.7 I    10.7 I
                        -I---------I---------I
                     15. I       0 I       2 I       2
  HUDSON STRAIT          I       0 I   100.0 I     7.1
                         I       0 I     8.3 I
                         I       0 I     7.1 I
                        -I---------I---------I
                     16. I       0 I       8 I       8
  EAST EAFFIN            I       0 I   100.0 I    28.6
                         I       0 I    33.3 I
                         I       0 I    28.6 I
                        -I---------I---------I
                 COLUMN          4        24        28
                  TOTAL       14.3      85.7     100.0

RAW CHI SQUARE =      8.26389 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0409
CRAMER≠S V =      .54327
CONTINGENCY COEFFICIENT =      .47737
NUMBER CF MISSING OBSERVATIONS =      222
```

TABLE XII

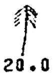
CROSSTABULATION OF TWO COLLAPSED SITE CATEGORIES (21 EQUALS SITES WITHIN HUDSON BAY AND 22 EQUALS SITES WITHIN EAST BAFFIN AND HUDSON STRAIT AREAS) BY TWO COLLAPSED SPINE REPRESENTATION CATEGORIES

```
                 VAR100
          COUNT  I
        ROW PCT  I                              ROW
        COL PCT  I                              TOTAL
        TOT PCT  I   ORNA   I   PLAI   I
SITE    ---------I----------I----------I
           21.   I     4    I     14   I      18
                 I   22.2   I   77.8   I    64.3
                 I  100.0   I   58.3   I
                 I   14.3   I   50.0   I
                -I----------I----------I
           22.   I      0   I     10   I      10
                 I      0   I  100.0   I    35.7
                 I      0   I   41.7   I
                 I      0   I   35.7   I
                -I----------I----------I
         COLUMN         4         24          28
          TOTAL      14.3       85.7       100.0

CORRECTED CHI SQUARE =      1.09537 WITH 1 DEGREE OF FREEDOM.  SIGNIFICANCE =   .2953
PHI =      .30429
CONTINGENCY COEFFICIENT =      .29111
NUMBER OF MISSING OBSERVATIONS =      222
```

TABLE XIII

CROSSTABULATION OF SITE BY RIB REPRESENTATION



```
                VAR101
          COUNT  I
        ROW PCT  I                                  ROW
        COL PCT  I                                  TOTAL
        TOT PCT  I    20.00I    21.00I    22.00I
SITE    ---------I---------I---------I---------I
              1  I     0   I     1   I     0   I       1
  ALARNERK SITE  I   0.0   I 100.0   I   0.0   I     5.6
                 I   0.0   I   7.1   I   0.0   I
                 I   0.0   I   5.6   I   0.0   I
                -I---------I---------I---------I
              5  I     0   I     1   I     0   I       1
  KAERSUT SITE   I   0.0   I 100.0   I   0.0   I     5.6
                 I   0.0   I   7.1   I   0.0   I
                 I   0.0   I   5.6   I   0.0   I
                -I---------I---------I---------I
              8  I     0   I     1   I     0   I       1
  LAKE HARBOUR   I   0.0   I 100.0   I   0.0   I     5.6
                 I   0.0   I   7.1   I   0.0   I
                 I   0.0   I   5.6   I   0.0   I
                -I---------I---------I---------I
              9  I     1   I     6   I     1   I       8
  BUTTON POINT   I  12.5   I  75.0   I  12.5   I    44.4
                 I 100.0   I  42.9   I  33.3   I
                 I   5.6   I  33.3   I   5.6   I
                -I---------I---------I---------I
             12  I     0   I     1   I     0   I       1
  TYARA SITE     I   0.0  .I 100.0   I   0.0   I     5.6
                 I   0.0   I   7.1   I   0.0   I
                 I   0.0   I   5.6   I   0.0   I
                -I---------I---------I---------I
             13  I     0   I     4   I     2   I       6
  IGLOOLIK       I   0.0   I  66.7   I  33.3   I    33.3
                 I   0.0   I  28.6   I  66.7   I
                 I   0.0   I  22.2   I  11.1   I
                -I---------I---------I---------I
         COLUMN        1        14         3          18
          TOTAL      5.6      77.8      16.7       100.0

RAW CHI SQUARE =      3.35714 WITH    10 DEGREES OF FREEDOM.  SIGNIFICANCE =   .9717
CRAMER≠S V =      .30538
CONTINGENCY COEFFICIENT =      .39647
```

TABLE XIV

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY RIB REPRESENTATION

```
               VAR101
         COUNT I
       ROW PCT I                                     ROW
       COL PCT I                                     TOTAL
       TOT PCT I   20.00I   21.00I   22.00I
SITE   --------I--------I--------I--------I
           13. I     0  I     4  I     2  I      6
  IGLOOLIK     I     0  I  66.7  I  33.3  I   33.3
               I     0  I  28.6  I  66.7  I
               I     0  I  22.2  I  11.1  I
              -I--------I--------I--------I
           14. I     0  I     2  I     0  I      2
  IGLOOLIK AREA I    0  I 100.0  I     0  I   11.1
               I     0  I  14.3  I     0  I
               I     0  I  11.1  I     0  I
              -I--------I--------I--------I
           15. I     0  I     2  I     0  I      2
  HUDSON STRAIT I    0  I 100.0  I     0  I   11.1
               I     0  I  14.3  I     0  I
               I     0  I  11.1  I     0  I
              -I--------I--------I--------I
           16. I     1  I     6  I     1  I      8
  EAST BAFFIN  I  12.5  I  75.0  I  12.5  I   44.4
               I 100.0  I  42.9  I  33.3  I
               I   5.6  I  33.3  I   5.6  I
              -I--------I--------I--------I
        COLUMN       1       14        3        18
         TOTAL     5.6     77.8     16.7     100.0

RAW CHI SQUARE =      3.35714 WITH     6 DEGREES OF FREEDOM.  SIGNIFICANCE =   .7629
CRAMER≠S V =      .30538
CONTINGENCY COEFFICIENT =      .39647
NUMBER OF MISSING OBSERVATIONS =      225
```

TABLE XV

CROSSTABULATION OF TWO COLLAPSED SITE CATEGORIES BY RIB REPRESENTATION

```
               VAR101
         COUNT I
       ROW PCT I                                     ROW
       COL PCT I                                     TOTAL
       TOT PCT I   20.00I   21.00I   22.00I
SITE   --------I--------I--------I--------I
           16. I     1  I     6  I     1  I      8
  EAST BAFFIN  I  12.5  I  75.0  I  12.5  I   44.4
               I 100.0  I  42.9  I  33.3  I
               I   5.6  I  33.3  I   5.6  I
              -I--------I--------I--------I
           17. I     0  I     8  I     2  I     10
  HUDSON BAY   I     0  I  80.0  I  20.0  I   55.6
               I     0  I  57.1  I  66.7  I
               I     0  I  44.4  I  11.1  I
              -I--------I--------I--------I
        COLUMN       1       14        3        18
         TOTAL     5.6     77.8     16.7     100.0

RAW CHI SQUARE =      1.41429 WITH     2 DEGREES OF FREEDOM.  SIGNIFICANCE =   .4931
CRAMER≠S V =      .28031
CONTINGENCY COEFFICIENT =      .26990
NUMBER OF MISSING OBSERVATIONS =      232
```

TABLE XVI

CROSSTABULATION OF SITE BY RIB OR PERIPHERAL NERVE REPRESENTATION

```
                    VAR099
             COUNT  I                                     BACK        SIDE   ROW
           ROW PCT  I                                                        TOTAL
           COL PCT  I
           TOT PCT  I    23.00I    24.00I    25.00I    26.00I    27.00I
SITE       ---------I---------I---------I---------I---------I---------I
                 1  I      2  I      0  I      1  I      3  I      0  I      6
  ALARNERK SITE     I   33.3  I    0.0  I   16.7  I   50.0  I    0.0  I   30.0
                    I   40.0  I    0.0  I   14.3  I  100.0  I    0.0  I
                    I   10.0  I    0.0  I    5.0  I   15.0  I    0.0  I
                   -I---------I---------I---------I---------I---------I
                 9  I      1  I      1  I      3  I      0  I      2  I      7
  BUTTON POINT      I   14.3  I   14.3  I   42.9  I    0.0  I   28.6  I   35.0
                    I   20.0  I  100.0  I   42.9  I    0.0  I   50.0  I
                    I    5.0  I    5.0  I   15.0  I    0.0  I   10.0  I
                   -I---------I---------I---------I---------I---------I
                12  I      0  I      0  I      1  I      0  I      0  I      1
  TYARA SITE        I    0.0  I    0.0  I  100.0  I    0.0  I    0.0  I    5.0
                    I    0.0  I    0.0  I   14.3  I    0.0  I    0.0  I
                    I    0.0  I    0.0  I    5.0  I    0.0  I    0.0  I
                   -I---------I---------I---------I---------I---------I
                13  I      2  I      0  I      2  I      0  I      2  I      6
  IGLOOLIK          I   33.3  I    0.0  I   33.3  I    0.0  I   33.3  I   30.0
                    I   40.0  I    0.0  I   28.6  I    0.0  I   50.0  I
                    I   10.0  I    0.0  I   10.0  I    0.0  I   10.0  I
                   -I---------I---------I---------I---------I---------I
            COLUMN          5         1         7         3         4        20
             TOTAL       25.0       5.0      35.0      15.0      20.0     100.0

RAW CHI SQUARE =     13.86395 WITH     12 DEGREES OF FREEDOM.  SIGNIFICANCE =    .3095
CRAMER≠S V =      .48069
CONTINGENCY COEFFICIENT =      .63984
```

TABLE XVII

CROSSTABULATION OF THREE SITES AND LOCALITIES BY FULL AND PARTIAL RIB OR PERIPHERAL NERVE REPRESENTATIONS

```
                    VAR099
             COUNT  I
           ROW PCT  I                    ROW
           COL PCT  I                    TOTAL
           TOT PCT  I  FULL    I  PART    I
SITE       ---------I---------I---------I
                9.  I      2  I      5  I      7
  BUTTON POINT      I   28.6  I   71.4  I   35.0
                    I   28.6  I   38.5  I
                    I   10.0  I   25.0  I
                   -I---------I---------I
               14.  I      5  I      7  I     12
  IGLOOLIK AREA     I   41.7  I   58.3  I   60.0
                    I   71.4  I   53.8  I
                    I   25.0  I   35.0  I
                   -I---------I---------I
               18.  I      0  I      1  I      1
  TYARA             I      0  I  100.0  I    5.0
                    I      0  I    7.7  I
                    I      0  I    5.0  I
                   -I---------I---------I
            COLUMN          7        13        20
             TOTAL       35.0      65.0     100.0

RAW CHI SQUARE =       .90005 WITH     2 DEGREES OF FREEDOM.  SIGNIFICANCE =    .6376
CRAMER≠S V =      .21214
CONTINGENCY COEFFICIENT =      .20752
NUMBER OF MISSING OBSERVATIONS =      230
```

TABLE XVIII

CROSSTABULATION OF TWO COLLAPSED SITE CATEGORIES BY FULL AND PARTIAL RIB OR PERIPHERAL NERVE REPRESENTATIONS

```
                    VAR099
          COUNT   I
          ROW PCT I                          ROW
          COL PCT I                          TOTAL
          TOT PCT I  FULL   I  PART    I
SITE      --------I---------I---------I
             17.  I       5 I       7 I      12
  HUDSON BAY      I    41.7 I    58.3 I    60.0
                  I    71.4 I    53.8 I
                  I    25.0 I    35.0 I
                 -I---------I---------I
             20.  I       2 I       6 I       8
  OTHER           I    25.0 I    75.0 I    40.0
                  I    28.6 I    46.2 I
                  I    10.0 I    30.0 I
                 -I---------I---------I
          COLUMN          7        13        20
           TOTAL       35.0      65.0     100.0

FISHER≠S EXACT TEST =    .39164
PHI =      .17118
CONTINGENCY COEFFICIENT =      .16873
NUMBER CF MISSING OBSERVATIONS =      230
```

TABLE XIX

CROSSTABULATION OF SITE BY LIMB REPRESENTATION




```
                    VAR102
            COUNT  I
          ROW PCT  I                                            ROW
          COL PCT  I                                            TOTAL
          TOT PCT  I  28.00I   29.00I   30.00I   31.00I
SITE       --------I-------I--------I--------I--------I
                 1 I     0 I      1 I      0 I      1 I       2
  ALARNERK SITE    I   0.0 I   50.0 I    0.0 I   50.0 I    13.3
                   I   0.0 I   25.0 I    0.0 I   16.7 I
                   I   0.0 I    6.7 I    0.0 I    6.7 I
                  -I-------I--------I--------I--------I
                 4 I     0 I      0 I      0 I      1 I       1
  ROWLEY SITE      I   0.0 I    0.0 I    0.0 I  100.0 I     6.7
                   I   0.0 I    0.0 I    0.0 I   16.7 I
                   I   0.0 I    0.0 I    0.0 I    6.7 I
                  -I-------I--------I--------I--------I
                 5 I     0 I      1 I      0 I      0 I       1
  KAERSUT SITE     I   0.0 I  100.0 I    0.0 I    0.0 I     6.7
                   I   0.0 I   25.0 I    0.0 I    0.0 I
                   I   0.0 I    6.7 I    0.0 I    0.0 I
                  -I-------I--------I--------I--------I
                 6 I     0 I      1 I      0 I      0 I       1
  JENS MUNK SITE   I   0.0 I  100.0 I    0.0 I    0.0 I     6.7
                   I   0.0 I   25.0 I    0.0 I    0.0 I
                   I   0.0 I    6.7 I    0.0 I    0.0 I
                  -I-------I--------I--------I--------I
                 9 I     0 I      0 I      0 I      1 I       1
  BUTTON POINT     I   0.0 I    0.0 I    0.0 I  100.0 I     6.7
                   I   0.0 I    0.0 I    0.0 I   16.7 I
                   I   0.0 I    0.0 I    0.0 I    6.7 I
                  -I-------I--------I--------I--------I
                12 I     1 I      0 I      0 I      2 I       3
  TYARA SITE       I  33.3 I    0.0 I    0.0 I   66.7 I    20.0
                   I 100.0 I    0.0 I    0.0 I   33.3 I
                   I   6.7 I    0.0 I    0.0 I   13.3 I
                  -I-------I--------I--------I--------I
                13 I     0 I      1 I      4 I      1 I       6
  IGLOOLIK         I   0.0 I   16.7 I   66.7 I   16.7 I    40.0
                   I   0.0 I   25.0 I  100.0 I   16.7 I
                   I   0.0 I    6.7 I   26.7 I    6.7 I
                  -I-------I--------I--------I--------I
            COLUMN       1        4        4        6        15
             TOTAL     6.7     26.7     26.7     40.0     100.0

RAW CHI SQUARE =    20.00000 WITH    18 DEGREES OF FREEDOM.  SIGNIFICANCE =   .3328
CRAMER≠S V =      .66667
CONTINGENCY COEFFICIENT =      .75593
```

TABLE XX

CROSSTABULATION OF REDUCED NUMBER OF SITE CATEGORIES BY LIMB REPRESENTATION

```
                    VAR102
             COUNT  I
           ROW PCT  I                                          ROW
           COL PCT  I                                         TOTAL
           TOT PCT  I   28.00I   29.00I   30.00I   31.00I
SITE       ---------I--------I--------I--------I--------I
                1.  I      0 I      1 I      0 I      1 I      2
  ALARNERK SITE     I      0 I   50.0 I      0 I   50.0 I   13.3
                    I      0 I   25.0 I      0 I   16.7 I
                    I      0 I    6.7 I      0 I    6.7 I
                   -I--------I--------I--------I--------I
                9.  I      0 I      0 I      0 I      1 I      1
  BUTTON POINT      I      0 I      0 I      0 I  100.0 I    6.7
                    I      0 I      0 I      0 I   16.7 I
                    I      0 I      0 I      0 I    6.7 I
                   -I--------I--------I--------I--------I
               12.  I      1 I      0 I      0 I      2 I      3
  TYARA SITE        I   33.3 I      0 I      0 I   66.7 I   20.0
                    I  100.0 I      0 I      0 I   33.3 I
                    I    6.7 I      0 I      0 I   13.3 I
                   -I--------I--------I--------I--------I
               14.  I      0 I      2 I      0 I      1 I      3
  IGLCOLIK AREA     I      0 I   66.7 I      0 I   33.3 I   20.0
                    I      0 I   50.0 I      0 I   16.7 I
                    I      0 I   13.3 I      0 I    6.7 I
                   -I--------I--------I--------I--------I
               19.  I      0 I      1 I      4 I      1 I      6
  IGLCOLIK ISL.     I      0 I   16.7 I   66.7 I   16.7 I   40.0
                    I      0 I   25.0 I  100.0 I   16.7 I
                    I      0 I    6.7 I   26.7 I    6.7 I
                   -I--------I--------I--------I--------I
            COLUMN         1        4        4        6       15
             TOTAL       6.7     26.7     26.7     40.0    100.0

RAW CHI SQUARE =    15.83333 WITH    12 DEGREES OF FREEDOM.  SIGNIFICANCE =    .1990
CRAMER≠S V =      .59317
CONTINGENCY COEFFICIENT =      .71660
NUMBER OF MISSING OBSERVATIONS =      235
```

TABLE XXI

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY TWO CATEGORIES OF LIMB REPRESENTATION

```
                    VAR102
             COUNT  I
           ROW PCT  I                     ROW
           COL PCT  I                    TOTAL
           TOT PCT  I   28.00I   99.00I
SITE       ---------I--------I--------I
               17.  I      0 I     11 I     11
  HUDSON BAY        I      0 I  100.0 I   73.3
                    I      0 I   78.6 I
                    I      0 I   73.3 I
                   -I--------I--------I
               20.  I      1 I      3 I      4
  OTHER             I   25.0 I   75.0 I   26.7
                    I  100.0 I   21.4 I
                    I    6.7 I   20.0 I
                   -I--------I--------I
            COLUMN         1       14       15
             TOTAL       6.7     93.3    100.0

FISHER≠S EXACT TEST =     .26667
PHI =      .44320
CONTINGENCY COEFFICIENT =      .40519
NUMBER CF MISSING OBSERVATIONS =      235
```

TABLE XXII

CROSSTABULATION OF SITE BY NECK AND HEAD MOTIFS

```
               VAR103
         COUNT I
       ROW PCT I                                                                                     ROW
       COL PCT I                                                                                     TOTAL
       TOT PCT I   33.00I   34.00I   35.00I   36.00I   38.00I   39.00I   40.00I   41.00I   42.00I
SITE   --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             1 I      3 I      0 I      0 I      0 I      4 I      2 I      5 I      1 I      0 I     15
 ALARNERK SITE I   20.0 I    0.0 I    0.0 I    0.0 I   26.7 I   13.3 I   33.3 I    6.7 I    0.0 I   38.5
               I   33.3 I    0.0 I    0.0 I    0.0 I   80.0 I   66.7 I   45.5 I   25.0 I    0.0 I
               I    7.7 I    0.0 I    0.0 I    0.0 I   10.3 I    5.1 I   12.8 I    2.6 I    0.0 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             2 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      1
 BIRKET SITE   I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    2.6
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    9.1 I    0.0 I    0.0 I
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.6 I    0.0 I    0.0 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             4 I      0 I      0 I      0 I      0 I      0 I      0 I      2 I      0 I      0 I      2
 ROWLEY SITE   I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    5.1
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   18.2 I    0.0 I    0.0 I
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    5.1 I    0.0 I    0.0 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             5 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      0 I      1
 KAERSUT SITE  I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I    2.6
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    9.1 I    0.0 I    0.0 I
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.6 I    0.0 I    0.0 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             6 I      0 I      1 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1
 JENS MUNK SITE I   0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.6
               I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
               I    0.0 I    2.6 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             7 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      1 I      2
 COATS MANSEL ISL I 0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   50.0 I   50.0 I    5.1
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   25.0 I  100.0 I
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.6 I    2.6 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             8 I      0 I      0 I      0 I      0 I      0 I      0 I      0 I      1 I      0 I      1
 LAKE HARBOUR  I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I  100.0 I    0.0 I    2.6
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I   25.0 I    0.0 I
               I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    0.0 I    2.6 I    0.0 I
              -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
        COLUMN        9        1        3        2        5        3       11        4        1       39
         TOTAL     23.1      2.6      7.7      5.1     12.8      7.7     28.2     10.3      2.6    100.0
(CONTINUED)
```

TABLE XXII (cont.)

```
                   VAR103
          COUNT  I
        ROW PCT  I                                                                                         ROW
        COL PCT  I                                                                                         TOTAL
        TOT PCT  I   33.00I   34.00I   35.00I   36.00I   38.00I   39.00I   40.00I   41.00I   42.00I
SITE    --------I--------I--------I--------I--------I--------I--------I--------I--------I--------I
              9  I      1  I      0  I      2  I      0  I      0  I      0  I      0  I      0  I      0  I      3
  BUTTON POINT   I   33.3  I    0.0  I   66.7  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    7.7
                 I   11.1  I    0.0  I   66.7  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I
                 I    2.6  I    0.0  I    5.1  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             10  I      1  I      0  I      0  I      0  I      0  I      0  I      0  I      0  I      0  I      1
  ANDREW GORDON BA I 100.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    2.6
                 I   11.1  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I
                 I    2.6  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             12  I      1  I      0  I      0  I      0  I      0  I      0  I      0  I      0  I      0  I      1
  TYARA SITE     I  100.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    2.6
                 I   11.1  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I
                 I    2.6  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I    0.0  I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
             13  I      3  I      0  I      1  I      2  I      1  I      1  I      2  I      1  I      0  I     11
  IGLOOLIK       I   27.3  I    0.0  I    9.1  I   18.2  I    9.1  I    9.1  I   18.2  I    9.1  I    0.0  I   28.2
                 I   33.3  I    0.0  I   33.3  I  100.0  I   20.0  I   33.3  I   18.2  I   25.0  I    0.0  I
                 I    7.7  I    0.0  I    2.6  I    5.1  I    2.6  I    2.6  I    5.1  I    2.6  I    0.0  I
                -I--------I--------I--------I--------I--------I--------I--------I--------I--------I
         COLUMN         9         1         3         2         5         3        11         4         1        39
          TOTAL      23.1       2.6       7.7       5.1      12.8       7.7      28.2      10.3       2.6     100.0

RAW CHI SQUARE =   112.58173 WITH    80 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0083
CRAMER≠S V =      .60070
CONTINGENCY COEFFICIENT =      .86181
NUMBER OF MISSING OBSERVATIONS =       1
```

TABLE XXIII

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY NECK AND HEAD MOTIFS

```
 . . . . . . . . .
                      VAR103
              COUNT  I
             ROW PCT I                                                                                          ROW
             COL PCT I                                                                                          TOTAL
             TOT PCT I    33.00I    34.00I    35.00I    36.00I    38.00I    39.00I    40.00I    41.00I    42.00I
SITE        ---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                 13. I       3 I       0 I       1 I       2 I       1 I       1 I       2 I       1 I       0 I     11
  IGLCOLIK           I    27.3 I       0 I     9.1 I    18.2 I     9.1 I     9.1 I    18.2 I     9.1 I       0 I   28.2
                     I    33.3 I       0 I    33.3 I   100.0 I    20.0 I    33.3 I    18.2 I    25.0 I       0 I
                     I     7.7 I       0 I     2.6 I     5.1 I     2.6 I     2.6 I     5.1 I     2.6 I       0 I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                 14. I       3 I       1 I       0 I       0 I       4 I       2 I       9 I       1 I       0 I     20
  IGLCOLIK AREA      I    15.0 I     5.0 I       0 I       0 I    20.0 I    10.0 I    45.0 I     5.0 I       0 I   51.3
                     I    33.3 I   100.0 I       0 I       0 I    80.0 I    66.7 I    81.8 I    25.0 I       0 I
                     I     7.7 I     2.6 I       0 I       0 I    10.3 I     5.1 I    23.1 I     2.6 I       0 I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                 15. I       2 I       0 I       0 I       0 I       0 I       0 I       0 I       1 I       0 I      3
  HUDSON STRAIT      I    66.7 I       0 I       0 I       0 I       0 I       0 I       0 I    33.3 I       0 I    7.7
                     I    22.2 I       0 I       0 I       0 I       0 I       0 I       0 I    25.0 I       0 I
                     I     5.1 I       0 I       0 I       0 I       0 I       0 I       0 I     2.6 I       0 I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                 16. I       1 I       0 I       2 I       0 I       0 I       0 I       0 I       0 I       0 I      3
  EAST BAFFIN        I    33.3 I       0 I    66.7 I       0 I       0 I       0 I       0 I       0 I       0 I    7.7
                     I    11.1 I       0 I    66.7 I       0 I       0 I       0 I       0 I       0 I       0 I
                     I     2.6 I       0 I     5.1 I       0 I       0 I       0 I       0 I       0 I       0 I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                 17. I       0 I       0 I       0 I       0 I       0 I       0 I       0 I       1 I       1 I      2
  HUDSON BAY         I       0 I       0 I       0 I       0 I       0 I       0 I       0 I    50.0 I    50.0 I    5.1
                     I       0 I       0 I       0 I       0 I       0 I       0 I       0 I    25.0 I   100.0 I
                     I       0 I       0 I       0 I       0 I       0 I       0 I       0 I     2.6 I     2.6 I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I
              COLUMN         9         1         3         2         5         3        11         4         1      39
               TOTAL      23.1       2.6       7.7       5.1      12.8       7.7      28.2      10.3       2.6   100.0

RAW CHI SQUARE =    56.65186 WITH    32 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0046
CRAMER≠S V =     .60262
CONTINGENCY COEFFICIENT =     .76959
NUMBER OF MISSING OBSERVATIONS =      204
```

TABLE XXIV

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY TWO CATEGORIES OF NECK AND HEAD MOTIFS

```
                    VAR103
           COUNT  I
         ROW PCT  ICROSSES   FACE FEA   ROW
         COL PCT  I          TURES     TOTAL
         TOT PCT  I    98.00I   99.00I
SITE     --------I--------I--------I
             13.  I       3  I      5  I      8
  IGLOOLIK        I   37.5  I   62.5  I   26.7
                  I   50.0  I   20.8  I
                  I   10.0  I   16.7  I
                 -I--------I--------I
             14.  I       1  I     16  I     17
  IGLOOLIK AREA   I    5.9  I   94.1  I   56.7
                  I   16.7  I   66.7  I
                  I    3.3  I   53.3  I
                 -I--------I--------I
             15.  I       0  I      1  I      1
  HUDSON STRAIT   I       0  I 100.0  I    3.3
                  I       0  I    4.2  I
                  I       0  I    3.3  I
                 -I--------I--------I
             16.  I       2  I      0  I      2
  EAST BAFFIN     I  100.0  I      0  I    6.7
                  I   33.3  I      0  I
                  I    6.7  I      0  I
                 -I--------I--------I
             17.  I       0  I      2  I      2
  HUDSON' BAY     I       0  I 100.0  I    6.7
                  I       0  I    8.3  I
                  I       0  I    6.7  I
                 -I--------I--------I
          COLUMN          6        24         30
           TOTAL       20.0      80.0      100.0

RAW CHI SQUARE =     12.39890 WITH     4 DEGREES OF FREEDOM.  SIGNIFICANCE =    .0146
CPAMER≠S V =       .64288
CONTINGENCY COEFFICIENT =      .54077
NUMBER OF MISSING OBSERVATIONS =      211
```

TABLE XXV

CROSSTABULATION OF THREE COLLAPSED SITE CATEGORIES BY TWO CATEGORIES OF NECK AND HEAD MOTIFS

```
                   VAR103
           COUNT   I
         ROW PCT   ICROSSES   FACE FEA    ROW
         COL PCT   I          TURES       TOTAL
         TOT PCT   I    98.00I    99.00I
SITE     ---------I---------I---------I
              15.  I       0 I       1 I       1
  HUDSON STRAIT    I       0 I  100.0  I     3.3
                   I       0 I     4.2 I
                   I       0 I     3.3 I
                  -I---------I---------I
              16.  I       2 I       0 I       2
  EAST BAFFIN      I  100.0  I       0 I     6.7
                   I    33.3 I       0 I
                   I     6.7 I       0 I
                  -I---------I---------I
              17.  I       4 I      23 I      27
  HUDSON BAY       I    14.8 I    85.2 I    90.0
                   I    66.7 I    95.8 I
                   I    13.3 I    76.7 I
                  -I---------I---------I
           COLUMN          6        24        30
            TOTAL       20.0      80.0     100.0

RAW CHI SQUARE =      8.70370 WITH      2 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0129
CRAMER≠S V =      .53863
CONTINGENCY COEFFICIENT =      .47422
NUMBER CF MISSING OBSERVATIONS =      211
```

TABLE XXVI

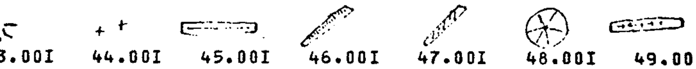
CROSSTABULATION OF TWO COLLAPSED SITE CATEGORIES BY TWO CATEGORIES OF NECK AND HEAD MOTIFS

```
                    VAR103
           COUNT   I
          ROW PCT  ICROSSES  FACE FEA   ROW
          COL PCT  I          TURES     TOTAL
          TOT PCT  I    98.00I   99.00I
SITE      ---------I---------I--------I
              17.  I      4  I    23  I     27
  HUDSON BAY       I   14.8  I  85.2  I   90.0
                   I   66.7  I  95.8  I
                   I   13.3  I  76.7  I
                  -I---------I--------I
              20.  I      2  I     1  I      3
  OTHER            I   66.7  I  33.3  I   10.0
                   I   33.3  I   4.2  I
                   I    6.7  I   3.3  I
                  -I---------I--------I
          COLUMN          6        24        30
           TOTAL       20.0      80.0     100.0

CORRECTED CHI SQUARE =     1.87500 WITH 1 DEGREE OF FREEDOM.  SIGNIFICANCE =   .1709
PHI =      .38889
CONTINGENCY COEFFICIENT =     .36245
NUMBER OF MISSING OBSERVATIONS =      211
```

TABLE XXVII

CROSSTABULATION OF SITE BY OTHER MOTIFS

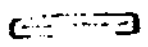


```
                    VAR104
             COUNT I
           ROW PCT I                                                                      ROW
           COL PCT I                                                                     TOTAL
           TOT PCT I    43.00I    44.00I    45.00I    46.00I    47.00I    48.00I    49.00I
SITE       --------I---------I---------I---------I---------I---------I---------I---------I
                 1 I       1 I       1 I       0 I       6 I       2 I       4 I       0 I     14
  ALARNERK SITE    I     7.1 I     7.1 I     0.0 I    42.9 I    14.3 I    28.6 I     0.0 I   19.7
                   I    33.3 I     6.7 I     0.0 I    20.7 I    25.0 I    57.1 I     0.0 I
                   I     1.4 I     1.4 I     0.0 I     8.5 I     2.8 I     5.6 I     0.0 I
                  -I---------I---------I---------I---------I---------I---------I---------I
                 4 I       0 I       0 I       0 I       0 I       0 I       0 I       1 I      1
  ROWLEY SITE      I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I   100.0 I    1.4
                   I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I    25.0 I
                   I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I     1.4 I
                  -I---------I---------I---------I---------I---------I---------I---------I
                 5 I       0 I       1 I       0 I       0 I       0 I       0 I       0 I      1
  KAERSUT SITE     I     0.0 I   100.0 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I    1.4
                   I     0.0 I     6.7 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I
                   I     0.0 I     1.4 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I
                  -I---------I---------I---------I---------I---------I---------I---------I
                 6 I       1 I       1 I       1 I       2 I       1 I       1 I       0 I      7
  JENS MUNK SITE   I    14.3 I    14.3 I    14.3 I    28.6 I    14.3 I    14.3 I     0.0 I    9.9
                   I    33.3 I     6.7 I    20.0 I     6.9 I    12.5 I    14.3 I     0.0 I
                   I     1.4 I     1.4 I     1.4 I     2.8 I     1.4 I     1.4 I     0.0 I
                  -I---------I---------I---------I---------I---------I---------I---------I
                 7 I       0 I       3 I       2 I       3 I       0 I       0 I       0 I      8
  COATS MANSEL ISL I     0.0 I    37.5 I    25.0 I    37.5 I     0.0 I     0.0 I     0.0 I   11.3
                   I     0.0 I    20.0 I    40.0 I    10.3 I     0.0 I     0.0 I     0.0 I
                   I     0.0 I     4.2 I     2.8 I     4.2 I     0.0 I     0.0 I     0.0 I
                  -I---------I---------I---------I---------I---------I---------I---------I
                 9 I       0 I       0 I       0 I       1 I       0 I       0 I       0 I      1
  BUTTON POINT     I     0.0 I     0.0 I     0.0 I   100.0 I     0.0 I     0.0 I     0.0 I    1.4
                   I     0.0 I     0.0 I     0.0 I     3.4 I     0.0 I     0.0 I     0.0 I
                   I     0.0 I     0.0 I     0.0 I     1.4 I     0.0 I     0.0 I     0.0 I
                  -I---------I---------I---------I---------I---------I---------I---------I
                12 I       0 I       3 I       0 I       0 I       0 I       0 I       0 I      3
  TYARA SITE       I     0.0 I   100.0 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I    4.2
                   I     0.0 I    20.0 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I
                   I     0.0 I     4.2 I     0.0 I     0.0 I     0.0 I     0.0 I     0.0 I
          ---------I---------I---------I---------I---------I---------I---------I---------I
                13 I       1 I       6 I       2 I      17 I       5 I       2 I       3 I     36
  IGLOOLIK         I     2.8 I    16.7 I     5.6 I    47.2 I    13.9 I     5.6 I     8.3 I   50.7
                   I    33.3 I    40.0 I    40.0 I    58.6 I    62.5 I    28.6 I    75.0 I
                   I     1.4 I     8.5 I     2.8 I    23.9 I     7.0 I     2.8 I     4.2 I
                  -I---------I---------I---------I---------I---------I---------I---------I
            COLUMN         3        15         5        29         8         7         4       71
             TOTAL       4.2      21.1       7.0      40.8      11.3       9.9       5.6    100.0

RAW CHI SQUARE =    54.31459 WITH    42 DEGREES OF FREEDOM.  SIGNIFICANCE =    .0964
CRAMER≠S V =      .35707
CONTINGENCY COEFFICIENT =     .65835
NUMBER OF MISSING OBSERVATIONS =        1
```

TABLE XXVIII

CROSSTABULATION OF SITE BY OTHER MOTIFS, OMITTING HUMAN FACE AND LONGITUDINAL LINES WITH CROSSARMS



```
                    VAR104
            COUNT  I
           ROW PCT I                                                  ROW
           COL PCT I   + +                                            TOTAL
           TOT PCT I   44.00I   45.00I   46.00I   47.00I   48.00I
SITE       --------I--------I--------I--------I--------I--------I
                 1 I      1 I      0 I      6 I      2 I      4 I      13
  ALARNERK SITE    I    7.7 I    0.0 I   46.2 I   15.4 I   30.8 I    20.3
                   I    6.7 I    0.0 I   20.7 I   25.0 I   57.1 I
                   I    1.6 I    0.0 I    9.4 I    3.1 I    6.3 I
                  -I--------I--------I--------I--------I--------I
                 5 I      1 I      0 I      0 I      0 I      0 I       1
  KAERSUT SITE     I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I     1.6
                   I    6.7 I    0.0 I    0.0 I    0.0 I    0.0 I
                   I    1.6 I    0.0 I    0.0 I    0.0 I    0.0 I
                  -I--------I--------I--------I--------I--------I
                 6 I      1 I      1 I      2 I      1 I      1 I       6
  JENS MUNK SITE   I   16.7 I   16.7 I   33.3 I   16.7 I   16.7 I     9.4
                   I    6.7 I   20.0 I    6.9 I   12.5 I   14.3 I
                   I    1.6 I    1.6 I    3.1 I    1.6 I    1.6 I
                  -I--------I--------I--------I--------I--------I
                 7 I      3 I      2 I      3 I      0 I      0 I       8
  COATS MANSEL ISL I   37.5 I   25.0 I   37.5 I    0.0 I    0.0 I    12.5
                   I   20.0 I   40.0 I   10.3 I    0.0 I    0.0 I
                   I    4.7 I    3.1 I    4.7 I    0.0 I    0.0 I
                  -I--------I--------I--------I--------I--------I
                 9 I      0 I      0 I      1 I      0 I      0 I       1
  BUTTON POINT     I    0.0 I    0.0 I  100.0 I    0.0 I    0.0 I     1.6
                   I    0.0 I    0.0 I    3.4 I    0.0 I    0.0 I
                   I    0.0 I    0.0 I    1.6 I    0.0 I    0.0 I
                  -I--------I--------I--------I--------I--------I
                12 I      3 I      0 I      0 I      0 I      0 I       3
  TYARA SITE       I  100.0 I    0.0 I    0.0 I    0.0 I    0.0 I     4.7
                   I   20.0 I    0.0 I    0.0 I    0.0 I    0.0 I
                   I    4.7 I    0.0 I    0.0 I    0.0 I    0.0 I
                  -I--------I--------I--------I--------I--------I
                13 I      6 I      2 I     17 I      5 I      2 I      32
  IGLOOLIK         I   18.7 I    6.3 I   53.1 I   15.6 I    6.3 I    50.0
                   I   40.0 I   40.0 I   58.6 I   62.5 I   28.6 I
                   I    9.4 I    3.1 I   26.6 I    7.8 I    3.1 I
                  -I--------I--------I--------I--------I--------I
            COLUMN       15        5       29        8        7        64
             TOTAL     23.4      7.8     45.3     12.5     10.9     100.0

RAW CHI SQUARE =    30.00696 WITH    24 DEGREES OF FREEDOM.  SIGNIFICANCE =    .1845
CRAMER≠S V =      .34237
CONTINGENCY COEFFICIENT =      .56498
NUMBER OF MISSING OBSERVATIONS =        1
```

TABLE XXIX

CROSSTABULATION OF COLLAPSED SITE CATEGORIES BY OTHER MOTIFS, OMITTING HUMAN FACE AND LONGITUDINAL LINES WITH CROSSARMS

```
                   VAR104
            COUNT I
          ROW PCT I                                                     ROW
          COL PCT I                                                     TOTAL
          TOT PCT I    44.00I    45.00I    46.00I    47.00I    49.00I
SITE     ---------I---------I---------I---------I---------I---------I
              13. I       6 I       2 I      17 I       5 I       2 I      32
  IGLOOLIK        I    18.8 I     6.3 I    53.1 I    15.6 I     6.3 I    50.0
                  I    40.0 I    40.0 I    58.6 I    62.5 I    28.6 I
                  I     9.4 I     3.1 I    26.6 I     7.8 I     3.1 I
                 -I---------I---------I---------I---------I---------I
              14. I       3 I       1 I       8 I       3 I       5 I      20
  IGLOOLIK AREA   I    15.0 I     5.0 I    40.0 I    15.0 I    25.0 I    31.3
                  I    20.0 I    20.0 I    27.6 I    37.5 I    71.4 I
                  I     4.7 I     1.6 I    12.5 I     4.7 I     7.8 I
                 -I---------I---------I---------I---------I---------I
              15. I       3 I       0 I       0 I       0 I       0 I       3
  HUDSON STRAIT   I   100.0 I       0 I       0 I       0 I       0 I     4.7
                  I    20.0 I       0 I       0 I       0 I       0 I
                  I     4.7 I       0 I       0 I       0 I       0 I
                 -I---------I---------I---------I---------I---------I
              16. I       0 I       0 I       1 I       0 I       0 I       1
  EAST BAFFIN     I       0 I       0 I   100.0 I       0 I       0 I     1.6
                  I       0 I       0 I     3.4 I       0 I       0 I
                  I       C I       0 I     1.6 I       0 I       0 I
                 -I---------I---------I---------I---------I---------I
              17. I       3 I       2 I       3 I       0 I       0 I       8
  HUDSON BAY      I    37.5 I    25.0 I    37.5 I       0 I       0 I    12.5
                  I    20.0 I    40.0 I    10.3 I       0 I       0 I
                  I     4.7 I     3.1 I     4.7 I       0 I       0 I
                 -I---------I---------I---------I---------I---------I
           COLUMN        15         5        29         8         7        64
            TOTAL      23.4       7.8      45.3      12.5      10.9     100.0

RAW CHI SQUAPE =     23.06419 WITH     16 DEGREES OF FREEDOM.  SIGNIFICANCE =    .1120
CRAMER≠S V =      .30016
CONTINGENCY COEFFICIENT =      .51469
NUMBER OF MISSING OBSEPVATIONS =      179
```

TABLE XXX

CROSSTABULATION OF TWO COLLAPSED SITE CATEGORIES BY OTHER MOTIFS, OMITTING HUMAN FACE AND LONGITUDINAL LINES WITH CROSSARMS

```
                   VAR104
           COUNT   I
           ROW PCT I                                                 ROW
           COL PCT I                                                 TOTAL
           TOT PCT I   44.00I   45.00I   46.00I   47.00I   48.00I
SITE       --------I--------I--------I--------I--------I--------I
               17. I    12  I     5  I    28  I     8  I     7  I    60
  HUDSON BAY       I  20.0  I   8.3  I  46.7  I  13.3  I  11.7  I  93.8
                   I  80.0  I 100.0  I  96.6  I 100.0  I 100.0  I
                   I  18.8  I   7.8  I  43.8  I  12.5  I  10.9  I
                  -I--------I--------I--------I--------I--------I
               20. I     3  I     0  I     1  I     0  I     0  I     4
  OTHER            I  75.0  I     0  I  25.0  I     0  I     0  I   6.3
                   I  20.0  I     0  I   3.4  I     0  I     0  I
                   I   4.7  I     0  I   1.6  I     0  I     0  I
                  -I--------I--------I--------I--------I--------I
           COLUMN       15        5       29        8        7       64
            TOTAL     23.4      7.8     45.3     12.5     10.9    100.0

RAW CHI SQUARE =      6.56184 WITH     4 DEGREES OF FREEDOM.  SIGNIFICANCE =   .1609
CRAMER≠S V =      .32020
CONTINGENCY COEFFICIENT =     .30495
NUMBER OF MISSING OBSERVATIONS =      179
```

TABLE XXXI

CROSSTABULATION OF LEVEL (METERS ABOVE SEA LEVEL) BY REALISTIC (14) AND ABSTRACT (23) CONVENTIONALISM

```
                 CONVENT
          COUNT I
        ROW PCT I                        ROW
        COL PCT I                      TOTAL
        TOT PCT I       14I       23I
LEVEL   --------I---------I---------I
           8.00 I      4  I      5  I      9
                I   44.4  I   55.6  I   12.7
                I   10.3  I   15.6  I
                I    5.6  I    7.0  I
               -I---------I---------I
           9.00 I      3  I      4  I      7
                I   42.9  I   57.1  I    9.9
                I    7.7  I   12.5  I
                I    4.2  I    5.6  I
               -I---------I---------I
          10.00 I      4  I      0  I      4
                I  100.0  I    0.0  I    5.6
                I   10.3  I    0.0  I
                I    5.6  I    0.0  I
               -I---------I---------I
          12.00 I      2  I      0  I      2
                I  100.0  I    0.0  I    2.8
                I    5.1  I    0.0  I
                I    2.8  I    0.0  I
               -I---------I---------I
          13.00 I      5  I      4  I      9
                I   55.6  I   44.4  I   12.7
                I   12.8  I   12.5  I
                I    7.0  I    5.6  I
               -I---------I---------I
          14.00 I      1  I      0  I      1
                I  100.0  I    0.0  I    1.4
                I    2.6  I    0.0  I
                I    1.4  I    0.0  I
               -I---------I---------I
          15.00 I     11  I     12  I     23
                I   47.8  I   52.2  I   32.4
                I   28.2  I   37.5  I
                I   15.5  I   16.9  I
               -I---------I---------I
          17.00 I      3  I      0  I      3
                I  100.0  I    0.0  I    4.2
                I    7.7  I    0.0  I
                I    4.2  I    0.0  I
               -I---------I---------I
          18.00 I      1  I      0  I      1
                I  100.0  I    0.0  I    1.4
                I    2.6  I    0.0  I
                I    1.4  I    0.0  I
               -I---------I---------I
          19.00 I      0  I      3  I      3
                I    0.0  I  100.0  I    4.2
                I    0.0  I    9.4  I
                I    0.0  I    4.2  I
               -I---------I---------I
          20.00 I      3  I      0  I      3
                I  100.0  I    0.0  I    4.2
                I    7.7  I    0.0  I
                I    4.2  I    0.0  I
               -I---------I---------I
          22.00 I      2  I      4  I      6
                I   33.3  I   66.7  I    8.5
                I    5.1  I   12.5  I
                I    2.8  I    5.6  I
               -I---------I---------I
         COLUMN       39        32        71
          TOTAL     54.9      45.1     100.0

RAW CHI SQUARE =    17.55573 WITH    11 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0925
CRAMER#S V =     .49726
CONTINGENCY COEFFICIENT =     .44525
NUMBER OF MISSING OBSERVATIONS =     179
```

TABLE XXXII

CROSSTABULATION OF COLLAPSED LEVEL CATEGORIES BY REALISTIC AND ABSTRACT CONVENTIONALISM

```
                  CONVENT
          COUNT  I
        ROW PCT  IREALISTC ABSTRACT   ROW
        COL PCT  I                   TOTAL
        TOT PCT  I      14.I      23.I
LEVEL   ---------I---------I---------I
           1.00  I    11   I     9   I     20
  8 THRU 10      I  55.0   I  45.0   I   28.2
                 I  28.2   I  28.1   I
                 I  15.5   I  12.7   I
                -I---------I---------I
           2.00  I     8   I     4   I     12
  12 THRU 14     I  66.7   I  33.3   I   16.9
                 I  20.5   I  12.5   I
                 I  11.3   I   5.6   I
                -I---------I---------I
           3.00  I    15   I    12   I     27
  15 THRU 18     I  55.6   I  44.4   I   38.0
                 I  38.5   I  37.5   I
                 I  21.1   I  16.9   I
                -I---------I---------I
           4.00  I     5   I     7   I     12
  19 THRU 22     I  41.7   I  58.3   I   16.9
                 I  12.8   I  21.9   I
                 I   7.0   I   9.9   I
                -I---------I---------I
         COLUMN       39        32         71
          TOTAL     54.9      45.1      100.0

RAW CHI SQUARE =      1.52468 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .6766
CRAMER≠S V =      .14654
CONTINGENCY COEFFICIENT =      .14499
NUMBER CF MISSING OBSERVATIONS =      179
```

TABLE XXXIII

CROSSTABULATION OF FIND UNIT BY REPRESENTATION

```
                       REP
             COUNT  I
            ROW PCT IHUMAN MA  COMPLETE  BEAR HEA  COMPLETE  COMPLETE  WALRUS H  WALRUS T  GOOSE HE  COMPLETE  MINI HAR    ROW
            COL PCT ISK-MASKE   BEAR     D          SEAL      WALRUS   EAD       USKS      AD         WHALE    POON HEA   TOTAL
            TOT PCT I        2I        3I        4I        5I        6I        7I        8I       11I       12I       14I
UNIT        --------I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                  1 I      1  I      1  I      1  I      1  I      0  I      1  I      0  I      1  I      0  I      2  I    45
  HOUSE             I    2.2  I    2.2  I    2.2  I    2.2  I    0.0  I    2.2  I    0.0  I    2.2  I    0.0  I    4.4  I  51.1
                    I   50.0  I   33.3  I   50.0  I   16.7  I    0.0  I   50.0  I    0.0  I  100.0  I    0.0  I   33.3  I
                    I    1.1  I    1.1  I    1.1  I    1.1  I    0.0  I    1.1  I    0.0  I    1.1  I    0.0  I    2.3  I
                   -I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                  2 I      1  I      1  I      1  I      2  I      1  I      1  I      1  I      0  I      2  I      4  I    32
  MIDDEN            I    3.1  I    3.1  I    3.1  I    6.3  I    3.1  I    3.1  I    3.1  I    0.0  I    6.3  I   12.5  I  36.4
                    I   50.0  I   33.3  I   50.0  I   33.3  I  100.0  I   50.0  I   50.0  I    0.0  I  100.0  I   66.7  I
                    I    1.1  I    1.1  I    1.1  I    2.3  I    1.1  I    1.1  I    1.1  I    0.0  I    2.3  I    4.5  I
                   -I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                  3 I      0  I      1  I      0  I      3  I      0  I      0  I      1  I      0  I      0  I      0  I    11
  BURIAL            I    0.0  I    9.1  I    0.0  I   27.3  I    0.0  I    0.0  I    9.1  I    0.0  I    0.0  I    0.0  I  12.5
                    I    0.0  I   33.3  I    0.0  I   50.0  I    0.0  I    0.0  I   50.0  I    0.0  I    0.0  I    0.0  I
                    I    0.0  I    1.1  I    0.0  I    3.4  I    0.0  I    0.0  I    1.1  I    0.0  I    0.0  I    0.0  I
                   -I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
            COLUMN         2          3          2          6          1          2          2          1          2          6      88
             TOTAL       2.3        3.4        2.3        6.8        1.1        2.3        2.3        1.1        2.3        6.8   100.0
(CONTINUED)
```

TABLE XXXIII (cont.)

```
                      REP
              COUNT  I
             ROW PCT IFULL HAR  ≠SHAMAN≠  PADDLE S  TUBE      CARIBOU   CARIBOU   CAPIBOU   THIN DIS  LANCE BL  ANTLER S    ROW
             COL PCT IPOON HEA  S≠ TEETH  HAPED 08                      HOOF      HEAD      C         ADE       EC TUBE    TOTAL
             TOT PCT I       15I       16I       17I       18I       20I       21I       22I       23I       24I       25I
UNIT         --------I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                  1  I      1  I      2  I      2  I      5  I      1  I      0  I      0  I     11  I      1  I     10  I     45
  HOUSE              I    2.2  I    4.4  I    4.4  I   11.1  I    2.2  I    0.0  I    0.0  I   24.4  I    2.2  I   22.2  I   51.1
                     I   20.0  I   50.0  I  100.0  I   71.4  I  100.0  I    0.0  I    0.0  I   61.1  I  100.0  I   66.7  I
                     I    1.1  I    2.3  I    2.3  I    5.7  I    1.1  I    0.0  I    0.0  I   12.5  I    1.1  I   11.4  I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                  2  I      2  I      2  I      0  I      1  I      0  I      2  I      1  I      5  I      0  I      4  I     32
  MIDDEN             I    6.3  I    6.3  I    0.0  I    3.1  I    0.0  I    6.3  I    3.1  I   15.6  I    0.0  I   12.5  I   36.4
                     I   40.0  I   50.0  I    0.0  I   14.3  I    0.0  I  100.0  I  100.0  I   27.8  I    0.0  I   26.7  I
                     I    2.3  I    2.3  I    0.0  I    1.1  I    0.0  I    2.3  I    1.1  I    5.7  I    0.0  I    4.5  I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
                  3  I      2  I      0  I      0  I      1  I      0  I      0  I      0  I      2  I      0  I      1  I     11
  BURIAL             I   18.2  I    0.0  I    0.0  I    9.1  I    0.0  I    0.0  I    0.0  I   18.2  I    0.0  I    9.1  I   12.5
                     I   40.0  I    0.0  I    0.0  I   14.3  I    0.0  I    0.0  I    0.0  I   11.1  I    0.0  I    6.7  I
                     I    2.3  I    0.0  I    0.0  I    1.1  I    0.0  I    0.0  I    0.0  I    2.3  I    0.0  I    1.1  I
                    -I---------I---------I---------I---------I---------I---------I---------I---------I---------I---------I
             COLUMN         5         4         2         7         1         2         1        18         1        15        88
              TOTAL       5.7       4.5       2.3       8.0       1.1       2.3       1.1      20.5       1.1      17.0     100.0
(CONTINUED)
```

TABLE XXXIII (cont.)

```
                  REP
            COUNT I
          ROW PCT ITOOTH    DOG       OPPOS WA  ROW
          COL PCT I                   LRUS HEA  TOTAL
          TOT PCT I      26I      27I      31I
UNIT      --------I--------I--------I--------I
                1 I      3 I      0 I      1 I     45
  HOUSE           I    6.7 I    0.0 I    2.2 I   51.1
                  I  100.0 I    0.0 I  100.0 I
                  I    3.4 I    0.0 I    1.1 I
                 -I--------I--------I--------I
                2 I      0 I      1 I      0 I     32
  MIDDEN          I    0.0 I    3.1 I    0.0 I   36.4
                  I    0.0 I  100.0 I    0.0 I
                  I    0.0 I    1.1 I    0.0 I
                 -I--------I--------I--------I
                3 I      0 I      0 I      0 I     11
  BURIAL          I    0.0 I    0.0 I    0.0 I   12.5
                  I    0.0 I    0.0 I    0.0 I
                  I    0.0 I    0.0 I    0.0 I
                 -I--------I--------I--------I
          COLUMN         3        1        1     88
           TOTAL       3.4      1.1      1.1  100.0

RAW CHI SQUARE =     45.77793 WITH    44 DEGREES OF FREEDOM.  SIGNIFICANCE =    .3982
CRAMER≠S V =      .51000
CONTINGENCY COEFFICIENT =      .58497
NUMBER OF MISSING OBSERVATIONS =      162
```

TABLE XXXIV

CROSSTABULATION OF FIND UNIT BY COLLAPSED ARTIFACT REPRESENTATION CATEGORIES

```
                  REP
            COUNT I
          ROW PCT IHUMAN    SEA      LAND MAM BIRD     DECORAT  MINIAT     ROW
          COL PCT I         MAMMALS  MAL               IMPLIMEN IMPLIMEN  TOTAL
          TOT PCT I     34.I     40.I     51.I     52.I     53.I     54.I
UNIT      --------I--------I--------I--------I--------I--------I--------I
               1. I      1 I      3 I      3 I      1 I     35 I      2 I     45
  HOUSE           I    2.2 I    6.7 I    6.7 I    2.2 I   77.8 I    4.4 I   51.1
                  I   50.0 I   21.4 I   30.0 I  100.0 I   63.6 I   33.3 I
                  I    1.1 I    3.4 I    3.4 I    1.1 I   39.8 I    2.3 I
                 -I--------I--------I--------I--------I--------I--------I
               2. I      1 I      7 I      6 I      0 I     14 I      4 I     32
  MIDDEN          I    3.1 I   21.9 I   18.8 I      0 I   43.8 I   12.5 I   36.4
                  I   50.0 I   50.0 I   60.0 I      0 I   25.5 I   66.7 I
                  I    1.1 I    8.0 I    6.8 I      0 I   15.9 I    4.5 I
                 -I--------I--------I--------I--------I--------I--------I
               3. I      0 I      4 I      1 I      0 I      6 I      0 I     11
  BURIAL          I      0 I   36.4 I    9.1 I      0 I   54.5 I      0 I   12.5
                  I      0 I   28.6 I   10.0 I      0 I   10.9 I      0 I
                  I      0 I    4.5 I    1.1 I      0 I    6.8 I      0 I
                 -I--------I--------I--------I--------I--------I--------I
          COLUMN         2       14       10        1       55        6                88
           TOTAL       2.3     15.9     11.4      1.1     62.5      6.8             100.0

RAW CHI SQUARE =     16.02229 WITH    10 DEGREES OF FREEDOM.  SIGNIFICANCE =    .0990
CRAMER≠S V =      .30172
CONTINGENCY COEFFICIENT =      .39246
NUMBER OF MISSING OBSERVATIONS =      162
```

TABLE XXXV

CROSSTABULATION OF FIND UNIT BY THREE COLLAPSED CATEGORIES OF ARTIFACT REPRESENTATION

```
                   REP
            COUNT I
          ROW PCT I                                  ROW
          COL PCT I                                  TOTAL
          TOT PCT I  A       I  B       I  C       I
UNIT      --------I---------I---------I---------I
               1. I       5 I       9 I      31 I      45
  HOUSE           I    11.1 I    20.0 I    68.9 I    51.1
                  I    45.5 I   100.0 I    45.6 I
                  I     5.7 I    10.2 I    35.2 I
                 -I---------I---------I---------I
               2. I       5 I       0 I      27 I      32
  MIDDEN          I    15.6 I       0 I    84.4 I    36.4
                  I    45.5 I       0 I    39.7 I
                  I     5.7 I       0 I    30.7 I
                 -I---------I---------I---------I
               3. I       1 I       0 I      10 I      11
  BURIAL          I     9.1 I       0 I    90.9 I    12.5
                  I     9.1 I       0 I    14.7 I
                  I     1.1 I       0 I    11.4 I
                 -I---------I---------I---------I
          COLUMN         11         9        68        88
           TOTAL       12.5      10.2      77.3     100.0

RAW CHI SQUARE =     9.90464 WITH     4 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0421
CRAMER≠S V =     .23723
CONTINGENCY COEFFICIENT =     .31807
NUMBER OF MISSING OBSERVATIONS =      162
```

TABLE XXXVI

CROSSTABULATION OF FIND UNIT BY TWO COLLAPSED CATEGORIES OF ARTIFACT REPRESENTATION

```
                   REP
            COUNT I
          ROW PCT IAMULETS  DEC IMPL   ROW
          COL PCT I         E          TOTAL
          TOT PCT I     56.I     57.I
UNIT      --------I---------I---------I
               1. I      14 I      31 I      45
  HOUSE           I    31.1 I    68.9 I    51.1
                  I    37.8 I    60.8 I
                  I    15.9 I    35.2 I
                 -I---------I---------I
               2. I      18 I      14 I      32
  MIDDEN          I    56.3 I    43.8 I    36.4
                  I    48.6 I    27.5 I
                  I    20.5 I    15.9 I
                 -I---------I---------I
               3. I       5 I       6 I      11
  BURIAL          I    45.5 I    54.5 I    12.5
                  I    13.5 I    11.8 I
                  I     5.7 I     6.8 I
                 -I---------I---------I
          COLUMN         37        51        88
           TOTAL       42.0      58.0     100.0

RAW CHI SQUARE =     4.91013 WITH     2 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0859
CRAMER≠S V =     .23621
CONTINGENCY COEFFICIENT =     .22989
NUMBER OF MISSING OBSERVATIONS =      162
```