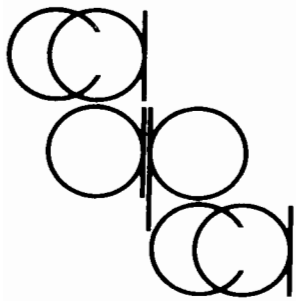

*CANADIAN REVIEW OF
PHYSICAL ANTHROPOLOGY*

*REVUE CANADIENNE
D'ANTHROPOLOGIE PHYSIQUE*

VOLUME 1

NUMBER 1

1979



Canadian Association for Physical Anthropology
Association pour l'Anthropologie Physique au Canada

Managing Editor

Ross D. E. MacPhee
Department of Anthropology
University of Manitoba
Winnipeg, Man.
R3T 2N2

(until June 1, 1979)

Acting Managing Editor

William D. Wade
Department of Anthropology
University of Manitoba
Winnipeg, Man.
R3T 2N2

(after June 1, 1979)

Editorial Board

Larry Sawchuk
University of Toronto

George Ellis
University of Western Ontario

Nancy S. Ossenberg
Queen's University

Editorial Assistant

Veronica M. Mahanger

The *Review/Revue* is published by the Canadian Association for Physical Anthropology/l'Association pour l'Anthropologie Physique au Canada. Articles, letters, book reviews and other materials relevant to physical anthropology and its sister disciplines are invited. Authors must follow the style guide of the *American Journal of Physical Anthropology*.

Membership inquiries, advertising copy and address corrections should be sent to the Secretary-Treasurer, Dr. N. S. Ossenberg, Department of Anatomy, Queen's University, Kingston, Ont. K7L 3N6.

COMMITTEE REPORT:

**Statement on the excavation, treatment, analysis
and disposition of human skeletal remains from
archaeological sites in Canada**

This brief has been prepared in response to public concern over the nature and purposes of scientific study of human skeletal remains from archaeological sites in Canada. Such remains are generally found in "unmarked graves" which commonly, though not exclusively, pertain to the prehistoric period, that period of time prior to the written historical record of a particular region or locale. Prehistoric peoples have occupied portions of this country for as long as 27,000 years. By 4,000 years ago all of Canada was inhabited, including the High Arctic. Archaeologists generally are responsible for the excavation of human skeletal remains when encountered in archaeological sites. Physical anthropologists are responsible for the analysis of the remains.

The purpose of this brief is to clarify what is meant by human skeletal remains, the types of archaeological sites in which they are found, and the information that is acquired from their analysis. It also proposes guidelines to be followed in the excavation, treatment, analysis and disposition of human skeletal remains from archaeological sites, as well as guidelines to be followed in the event of the accidental discovery of human skeletal remains. The subject is further considered with respect to the concerns of living native peoples in that certain archaeological sites, particularly those of the late prehistoric period and those of the protohistoric period, have direct bearing on their cultural and biological heritage.

HUMAN SKELETAL REMAINS

The human skeletal remains found in an archaeological site may consist of whole or partial skeletons, or individual skeletal parts such as skulls, jaws, teeth, limb bones, ver-

tebrae, ribs, and fragments thereof. Remains usually consist solely of bones, and their arrangement in the ground indicates the body was buried in the flesh or as a bone bundle. Prehistoric peoples practiced different forms of burial such as the separate placement of individuals in cemeteries, houses or above-ground scaffolds, the placement of bone bundles in communal pits, and cremation.

**ARCHAEOLOGICAL SITES WITH
SKELETAL REMAINS**

Many archaeological sites do not contain human remains. Those that do are of three types:

- (1) A specific burial ground, or "cemetery", where the skeletal remains of two or more persons have been deliberately placed.
- (2) A village, town, or temporary campsite where the skeletal remains of one or more persons have been deliberately placed or have been deposited as part of the refuse of the site. These primarily are habitation sites. The excavation of the site results in the *unexpected* discovery of human skeletal remains, except in rare instances where the known cultural practice was to place the deceased within the villages.
- (3) A location in which human skeletal remains have been secondarily deposited by the action of natural forces such as earth movements or the outwash of rivers and streams.

There generally is no *a priori* knowledge that a site will contain skeletal remains. The identification is made after survey and test excavations or, as in a vast number of cases, when prehistoric skeletal remains are exposed by non-archaeological activities such as construction, farming, and soil erosion.

INFORMATION ACQUIRED FROM THE ANALYSIS OF HUMAN SKELETAL REMAINS

Human skeletal remains from archaeological sites aid the understanding of population and culture history. Indeed, they provide the only means of establishing the genetic identity of an archaeological population and, therefore, skeletal remains are *essential* to reconstructing its history. Moreover, archaeological skeletal remains aid modern medicine in the study of diseases and injuries that affect bones, and in establishing methods for the identification of unknown deceased as required by modern forensic practice.

Physical anthropology, like all other sciences, is principally a method, and much of the research on human skeletal remains in these three areas is designed to provide and test methods of study that will solve specific problems. The development of effective methods and informative results requires that scholars investigate similar research problems using many varied and geographically diverse archaeological assemblages of human skeletal remains, and that different scholars research the same collections of human skeletal remains with new ideas and new approaches. The methods of physical anthropology are gradually developed and enhanced with new investigations and the application of new techniques. These projects often take years to be completed. For these reasons it is important that existing collections of archaeological skeletal remains are preserved for study and that future controlled excavations are conducted.

Archaeological Reconstruction

The type of information that is acquired from the study of human skeletal remains depends on the type of site from which the remains are derived, the amount and kinds of skeletal parts, and the number of represented individuals. The larger the collection of skeletal remains, the greater is the amount of information and the broader is its scope. There are six categories of information:

(1) *Physical characteristics* such as stature, body build, robustness and facial features, and the analysis of how much or how little these differ among contemporaries, ancestors and descendants.

(2) *Biological features*, or genetic elements,

which enable the study of the degree of relatedness among earlier populations and their relationships with historical and modern groups of people.

(3) *Demographic factors* which define the structure of the population in terms of its age groups and sex ratio, and provide information on birth rates, death rates, and the longevity of past peoples.

(4) *Pathological signs* which permit inferences about diseases and accidents that afflicted past populations and how such maladies were treated, the extent and intensity of conflict with neighbors, and the occurrences of plagues and famine.

(5) *Evolutionary processes* that have shaped the development of modern man through hundreds of thousands of years.

(6) *Treatment of the dead* which reflects the social organization, societal mores and religious life of past populations.

. . . The above information is an essential part of archaeological reconstruction and can *only* be derived from the study of human skeletal remains. For a particular site, each category of information can be fully realized only with thorough comparative analysis of existing collections of human skeletal remains.

Medical Information

Archaeological skeletal remains form important sources for research in the study and identification of disease processes. They enable study of the sequential changes of certain diseases of the skeleton, information that is not as readily obtainable from clinical study of living people and from medical autopsies. The initial signs of certain diseases, previously unknown in modern medical practice, have been identified from archaeological skeletal remains. For example, the initial signs of leprosy were identified from study of the sequential changes of the disease in archaeological skeletal remains from the Medieval Period in Europe. That knowledge has benefitted modern living victims of the disease by permitting its prompt recognition and treatment. Present research on 1,000 year old skeletons from the American Midwest is providing information on the progress and effects of arthritic spinal diseases. Other research in Canada and the United States is concentrating on the associations between

different diets and lifestyles in prehistoric societies and certain diseases manifested in the skeleton. The intent of this research is to help clarify the effects of nutrition and environment on diseases and deficiencies in modern populations.

Forensic Identification

Modern forensic practice requires the identification of unknown deceased in legal situations concerning missing persons, possible homicide or suicide victims, and victims of mass disasters and warfare. Often only the skeleton or skeletal parts are available for identification, and the requirement is to determine age, sex and race of the person or persons, as well as any individualizing features such as signs of bone disease, fracture or other physical deformities. These assessments are a critical first step toward the ultimate identification of the deceased and may be used in legal court proceedings. Although methods for the identification of age, sex and race have been developed from the study of the skeletons of modern medical-school dissecting-room subjects, physical anthropologists must heavily rely on the experience they acquire from careful study of archaeological skeletal remains to expertly apply forensic identification methods. The techniques for identification continue to be developed and refined on that basis.

GUIDELINES

A major area of public concern is how the human skeletal remains from archaeological sites are treated and how they are preserved and stored for future research. It is standard practice among physical anthropologists that human remains, regardless of their antiquity and geographic origin, be treated with respect and that the remains be carefully placed and stored in appropriately designed facilities. Stored collections are accessible only to qualified researchers who have demonstrated the ability and proper training for research on human skeletal remains. In order to clarify procedures to be followed by researchers, the CANADIAN ASSOCIATION FOR PHYSICAL ANTHROPOLOGY recommends certain guidelines with respect to the excavation, treatment, analysis and disposition of human skeletal remains from archaeological sites. A second set of guidelines is proposed

with reference to the accidental discovery of human skeletal remains.

Guidelines for Archaeological Research

It is recommended that:

- (1) The survey, inventory and excavation of archaeological sites be stringently controlled in each province or territory by one agency legally charged with that purpose and that such agencies be staffed with professional archaeologists;
- (2) A close working liaison be established between the provincial and territorial agencies and the National Museum of Man which is charged with responsibility for the survey, inventory and excavation of archaeological sites in Canada;
- (3) The survey, inventory and excavation of archaeological sites be restricted to qualified researchers and legally regulated by provincial or federal permit systems;
- (4) When human skeletal remains are involved in the excavation of a site, their excavation and analysis conform with legal provincial or federal procedures governing such remains;
- (5) Legal procedures governing known *archaeological* skeletal remains be relegated to one provincial or territorial statute, such as an "Archaeological Sites Act", and that the governing procedures of the act be uniform in all provinces and territories. Archaeological human skeletal remains should be clearly excluded from other statutes, such as Coroners Acts and Cemeteries Acts, unless such remains have kin relationships with living persons¹;
- (6) When human skeletal remains are involved in the excavation of a site, every effort be made to contact and consult with a qualified physical anthropologist and that prior arrangements be made for the scholarly analysis of the remains;
- (7) The excavation of human skeletal remains be carried out within the controlled methods of archaeology;

¹A survey of existing provincial and federal legislation indicates a lack of uniformity in Canada among statutes governing human skeletal remains from archaeological sites. In some provinces, human skeletal remains may be under the jurisdiction of three or more statutes, including Coroners Acts, Anatomy Acts, Cemeteries Acts, Fatality Inquiries Acts, Heritage Conservation Acts, Archaeological Sites Acts, Antiquities Acts, etc. Imprecise wording in these statutes makes it difficult for one to know exactly whether *archaeological* human remains come under one or all of their jurisdictions, and in the latter case, whether one statute takes precedence over another. In some cases, the legal regulations appear to be in conflict when more than one statute is involved.

- (8) Human skeletal remains be treated with respect both during and after excavation;
- (9) The excavated remains be catalogued and deposited in a recognized institution that is properly equipped for their inventory, care and storage, such that the remains can be made accessible to future qualified researchers;
- (10) Any analysis of the human skeletal remains be summarized in writing, and that this statement and any others resulting from analysis be deposited with the provincial or federal agency responsible for the excavation.

Guidelines for the Accidental Discovery of Human Skeletal Remains

Human skeletal remains may accidentally be discovered by members of the public during urban or rural development projects, hiking, camping or other activities. Such remains may be archaeological in nature or they may be those of recently deceased persons. Recommendations with respect to such discoveries are that:

- (1) The remains be treated as a forensic matter and, therefore, not be handled or removed by the discoverer;
- (2) The discoverer immediately contact the local law enforcement agency;
- (3) The law enforcement agency contact the coroner and nearest qualified physical anthropologist for consultation on the identification of the remains;
- (4) The remains continue under the jurisdiction of the coroner unless it can explicitly be shown that they are of an archaeological nature;
- (5) Contact be made with a qualified archaeologist for controlled removal of the remains and survey of the immediate location in which they have been discovered. This is to be accomplished in cooperation with the coroner and local law enforcement agency if the remains represent a forensic matter¹, and in cooperation with the provincial or federal agency responsible for archaeological sites if the remains are an archaeological matter;
- (6) A detailed report on the discovery and identification of the remains be completed by the physical anthropologist and archaeologist whether the case is a forensic or an archaeological matter, and that the report be filed with the coroner's office and with the provincial or federal agency responsible for archaeological sites;

- (7) If the discovery is determined to be an archaeological matter, the provincial or federal agency assume immediate responsibility regarding the excavation, treatment, analysis and disposition of the remains.

NATIVE PEOPLES' CONCERNS

Certain archaeological sites in Canada, particularly those of the late prehistoric and protohistoric periods, have direct bearing on the cultural and biological heritage of living native peoples. Some native peoples' organizations object to the excavation, treatment, analysis and disposition of human skeletal remains from these sites. The objections range from strong demands that human skeletal remains not be excavated at all on the grounds of religious desecration, to expressions of concern that the knowledge gained from excavation — not only of the human remains but also of cultural objects — is not being adequately returned to native peoples and, hence, is of little benefit to them.

It is significant, however, that in some areas of the country, archaeologists and physical anthropologists *have* established close working relations with local native communities to the satisfaction of all concerned. These productive relations in large measure developed from determined efforts to increase communication among archaeologists, physical anthropologists, and the local communities. It is recommended, therefore, that communication and consultation with local communities, on the part of both individual researchers and the provincial or federal agencies responsible for archaeological sites, becoming a working rule uniformly applied throughout the country. The CANADIAN ASSOCIATION FOR PHYSICAL ANTHROPOLOGY urges individual researchers — archaeologists and physical anthropologists — to consult with local native band councils about their projects and to keep local communities informed of the progress of those projects. The ASSOCIATION also encourages individual researchers to return information to the communities in the form of unpublished and published reports, and by means of formal lectures and informal

¹The experience of archaeologists in the exacting techniques of field documentation can be of considerable aid to law enforcement agencies in forensic matters.

presentations before, during and after field work. Every effort should be made to fully explain the nature of the research before it is conducted and to encourage the participation of the community.

The above recommendations apply to those archaeological sites that can be shown to have direct bearing on the cultural and biological heritage of a particular local native community. It should be recognized that no single public interest group can lay claim to all of Canada's prehistory or history. Canada's prehistory and history is the heritage of all Canadians and that of the global community in general. To function effectively and objectively, archaeology and physical anthropology cannot be publicly restricted to the excavation of certain types of sites and to the analysis of certain types of archaeological materials whether they are

cultural objects or human skeletal remains. By this token, the accidental or intentional excavation of pioneer cemeteries and human skeletal remains must also be given consideration in and for scholarly research. The archaeological excavation of human skeletal remains may constitute religious desecration in the eyes of some individuals. However, to impede or to curtail archaeological, medical and forensic research on human skeletal remains because of the religious views of some individuals requires that the vast majority of humanity, including Canada's native peoples, be deprived of the benefits that scholarly research on the dead can offer the living.

(Drafted by the Committee on the disposition of archaeological human remains — J. S. Cybulski, N. S. Ossenberg, and W. D. Wade.)