FOUR

STUDYING POPULATION, LANGUAGES, AND CULTURES IN NORTH AMERICA AS THEY WERE AT AD 1500

INTRODUCTION

This chapter focuses on the methods of reconstructing the populations, languages, and **traditional lifeways** of the Indigenous peoples of North America immediately before the arrival of Europeans in the sixteenth century. Although Europeans had been in the north-east part of the continent before this time, their impact on the populations, languages, and cultures of the Indigenous peoples had been largely insignificant beyond their local areas (i.e., Newfoundland, Greenland). Significant and large-scale impacts on Indigenous peoples and their cultures began with incursions onto the continent by the Spanish in the early 1500s, eventually followed by the English, French, and others.

The objective of much anthropological research on the Indigenous peoples of North America has been to describe what the populations, languages, and cultures were like at approximately AD 1500, before the influence of Europeans was manifested in population loss, language loss, and culture change. These are primarily the cultures that Boas and other anthropologists of the late 1800s and early 1900s were trying to reconstruct.

Regarding population, the chapter provides an overview of the research methods used to reconstruct populations from about AD 1500, and provides some results of that research. Regarding language, the chapter provides an overview of the languages thought to have been spoken around AD 1500, including the number and classification of these languages. The changes in populations and languages that resulted from European incursions are covered in Chapter 6.

TABLE 4.1

Methods Used to Reconstruct Population, Languages, and Traditional Lifeways

Population

Ecological research (e.g., determining carrying capacity)
Historic research (e.g., considering records of Europeans)
Ethnographic research (e.g., oral history of Indigenous peoples)
Archaeological research (e.g., making inferences from number, size, and structure of settlements)

Languages

Historical research (e.g., considering records of Europeans)
Linguistic research (e.g., considering the differences between existing languages)
Ethnographic research (e.g., oral history and contemporary speakers)

Traditional Lifeways

Historical research (e.g., considering the records of Europeans)
Ethnographic research (e.g., oral history and recall ethnography of Indigenous peoples)
Archaeological research (e.g., using sites and artifacts to reconstruct lifeways)

Regarding traditional culture, this chapter covers the fundamental methods and concepts used by anthropologists trying to reconstruct Indigenous lifeways from approximately AD 1500. It builds upon some of the information on the anthropological perspective covered in Chapter 2. An overview of traditional lifeways is the focus of Chapter 5.

The principal methods of reconstructing populations, languages, and traditional lifeways are listed in Table 4.1.

POPULATION AT AD 1500

Estimating the late prehistoric and early historic period populations of the Indigenous peoples of North America has long been a topic of interest, extending back into the sixteenth century. The Europeans of the sixteenth century, subsequent colonial governments, and scholarly researchers including historians, demographers, and anthropologists have all made contributions, but there is little consensus on how many people were actually on the continent at AD 1500—or on what the best methods are for finding this out.

For anthropologists, interest in and research on those early population numbers is considered important for multiple reasons. Population is integral to understanding all other aspects of culture. Certain kinds of subsistence strategies, settlement patterns, and social and political institutions, for example, only make sense if populations are within a specific size range. Thus, when seeking to describe, understand, or explain traditional cultures, being able to estimate the population size is significant. Know-

ing the numbers of these populations in AD 1500 is also important for being able to chart the impact of Europeans on population loss, in general terms as well as more specifically—for example, through the introduction and spread of disease. Such estimates are important for scholarly reasons, including testing hypotheses about the impacts of colonial processes. They also have an applied anthropological aspect, such as providing data for Indigenous claims about prehistoric use and occupancy of territories.

Population estimates by anthropologists and other scholars have varied widely over the past 100 years. Many early twentieth-century estimates are now considered to have been unrealistically low. Well-known anthropologist Alfred Kroeber, for example, estimated the population at about 1 million. One of the things that many of the early researchers failed to consider was that many populations suffered significant decline through diseases brought by Europeans long before they encountered Europeans themselves, with these diseases spreading through contact between infected and non-infected Indigenous groups.

At the other extreme, some researchers making population estimates in the late twentieth century suggested numbers close to 20 million. Most scholars believe such estimates to be a significant overestimation.

In the early twenty-first century, estimates of the Indigenous population in AD 1500 generally range between 2 and 10 million. Many well-known anthropologists have made estimates. Douglas Ubelaker (2006), for example, suggests there were about 2.4 million; Dean Snow (2010) estimates there were about 3.5 million; Milner and Chaplin (2010) suggest there were about 4 million; and Mark Sutton (2008) suggests 10 million. One of the most well-known scholars focusing on North American Indigenous populations is Indigenous (Cherokee) demographer Russell Thornton (2008), who suggests that the population at about AD 1500 was approximately 7 million.

Variability in population estimates results from the variety of methods used by researchers. There are many different ways to reconstruct populations, and various researchers use different methods, different sets of data, and assign differing weights to variables. The major approaches to estimating population rely on research from ecology, ethnohistory, ethnography, archaeology, and biological anthropology. Most estimates use a combination of different approaches.

Ecological research involves determining the **carrying capacity** of a locality, which requires a reconstruction of the environment before estimating population. Determining the kinds and relative abundance of animals and plants in an area may lead to inferences about how many people could have lived there. The central problem with this approach is that

while it allows inferences about how many people the environment could have supported, it does not necessarily prove how many people actually lived there.

Ethnohistoric research on the population at AD 1500 involves examining the written documents detailing these populations, which were created mostly by Europeans; these include letters, journals, and government reports. They often provide valuable information but can have limited use for the many areas of the continent where population loss was significant before the arrival of Europeans in that specific region. Researchers often have to evaluate the records with consideration of the abilities of those doing the recording to compile accurate numbers, especially for groups that were not living in permanent settlements. Some researchers have used the counts of warriors, and from that have estimated village populations based on a fixed number of how many people each warrior represented.

Some researchers have worked with population data for specific Indigenous groups for specific time periods during the historic period to make estimations of the population at AD 1500. Most Indigenous groups in North America reached their lowest population numbers during the 1800s and early 1900s, after which population numbers began to be kept for those specific groups. Researchers calculate the rate of decline over the time the records started being kept and then use the same rate to go back to AD 1500. The problem with this technique is that it is impossible to know whether the rate of decline was steady.

Ethnographic research often takes into account the oral traditions of Indigenous peoples in regard to past populations, but these are of limited value without physical evidence. Often, however, the ethnographic research leads archaeologists to search in specific locations for evidence of villages that were mentioned to ethnographers, which may lead to the kinds of evidence that can be used to estimate populations with increased reliability.

Archaeologists use several different methods for reconstructing population size. The primary method involves making inferences based on habitation dwellings, including the total number of dwellings, size of rooms, and number of rooms. Archaeologists generally use **ethnographic analogy** to support their inferences. For example, if a particular style of Indigenous structure was observed or otherwise known to accommodate 30 people in the historic period, and the same size and shape of structure is observed at a site dating to AD 1500, then those structures are also assumed to have accommodated 30 people.

Archaeologists also use the content and size of refuse deposits (e.g., amount of food refuse, numbers of broken pots, etc.) to make inferences

Image not available for online distribution.

about population size, but these are less reliable conclusions than those using habitation dwellings. Archaeologists recognize that many groups had settlement patterns involving mobility, and so they are careful to account for that in their estimations (e.g., understanding that a group may have had multiple habitation sites within their territory).

Human skeletal remains have limited use in estimating populations. Burial grounds, for example, are rarely found in close proximity to habitation sites, and for mobile groups, burial may have taken place in various areas throughout the territory. Also, many groups preferred to treat their dead in ways other than burial in the ground (e.g., cremation). The analysis of skeletons may lead to data on diet, health, age of death, and the various causes of death, however, which may be factored into population estimates.

Anthropologist Douglas Ubelaker produced estimates of the population of each culture area in North America at the time of initial contact between Indigenous peoples and Europeans (see Table 4.2) by using data on population size included in the regional volumes of the Smithsonian Institution's *Handbook of North American Indians*. The concept of "culture

TABLE 4.2
Population of Indigenous Peoples of North America at Time of Initial
Contact with Europeans (based on Ubelaker 2006)

AREA	NUMBER OF PEOPLE	NUMBER/100 SQ KM
Arctic	71,630	3
Subarctic	73,410	1
Northwest Coast	143,600	44
California	216,360	73
Southwest	494,560	31
Great Basin	37,500	4
Plateau	87,000	17
Plains	233,730	8
Northeast	414,930	22
Southeast	586,630	65

TOTAL POPULATION 2,359,630 AVERAGE DENSITY 14/100 SQ KM

area" is elaborated upon in the latter part of this chapter. Readers are cautioned that, although they are based on scholarship, these estimates tend to be quite conservative, falling at the low end of what most anthropologists would accept as the likely range. Despite the conservative bias of the estimates, the table does provide a good comparison to view the differences in population between the various areas of the continent, both in real numbers of people and, no less importantly, in population density.

INDIGENOUS LANGUAGES AT AD 1500

Anthropologists have long been interested in the languages of the Indigenous peoples of North America. Beginning with the first explicitly anthropological research in the 1800s, they have sought to learn, understand, and classify these languages. Almost all anthropologists working firsthand with Indigenous peoples have recognized the value of learning the language of those they seek to study, and many have taken the study of languages as their primary research focus. For some, these languages have been key to communicating with group members and understanding their culture. For others, specific languages became the focus of their studies, with specific interests in sound systems, grammar, vocabulary, and usage. Others have focused on broader or more general issues relating to language, such as the evolution of languages, language comparisons, and classification.

The interest in, and the importance of, the Indigenous languages of North America is expressed by Ives Goddard (1996, 1):

The native languages of North America do not belong to a single family or conform to a single uniform type. For the consideration of general questions in linguistic theory regarding the nature of human languages and its varieties, the North American languages take their places among the languages of the rest of the world. In fact these languages are extraordinarily diverse, and concomitantly they attest some types of linguistic organization that are rare elsewhere and whose study has greatly enriched the understanding of the basic principles of language.

Image not available for online distribution.

Documenting languages was a primary objective of the anthropologists working with Indigenous groups in the late nineteenth and early twentieth centuries. Boas and others of the time routinely learned the languages of the people they were studying and many attempted to document these languages through writing. Some anthropologists sought to document the languages through sound recordings, as well.

Anthropologists recognize that language is but one kind of communication system exhibited by the Indigenous peoples of North America. Language may be broadly defined as a set of rules governing speech, which in addition to vocabulary include grammar and syntax. Other forms of communication include gestures, signals, rock art, and the creation and use of other kinds of symbols. Although these other kinds of communication

often involved creating records, none of these would qualify as a written language.

Considerable anthropological research on languages has focused on identifying the number of distinct languages at AD 1500. A common definition of language is that it is a mutually unintelligible form of speech, which essentially means that two people who do not speak the same language cannot effectively communicate with one another through speech. This differentiates language from dialect; two people speaking different dialects may not understand all the words or language patterns of the other, but they can still effectively communicate.

Attempting to determine the precise number of languages before the arrival of Europeans is problematic, as no Indigenous group of North America had a written form of speech before that time. Consequently, estimates of the number of distinct languages at AD 1500 are largely based on historical records beginning in the 1500s, and the languages that have continued to be spoken since then. Since languages were not written, and there was no technology to record sounds during most of the historic period, estimates also require some speculation, such as distinguishing between dialects and languages.

Despite the problems with estimating the number of languages, it is widely accepted that there were about 400 distinct languages being spoken in North America around AD 1500, and possibly more. About half of those languages continue to exist today. Many are endangered; these languages have very few speakers remaining and their documentation is incomplete.

There is little agreement among anthropological linguists or linguistic anthropologists on how best to classify the Indigenous languages of North America. A simple system includes grouping similar languages into language families. Some examples are included in Table 4.3.

A standard source on the languages of the Indigenous peoples of North America was produced in volume 17 of the *Handbook of North American Indians*, edited by Ives Goddard (1996). In it, Goddard produced what he calls the "Consensus Classification of the Native Languages of North America," placing more than 400 distinct languages into 62 distinct language families.

Placement in the same language family assumes a common origin for the speakers of those now-distinct languages. Linguists, for example, can compare differences in languages and then, using assumptions about the rate of language change, draw inferences about how many hundreds or thousands of years the speakers of the same language have been isolated from each other.

Languages are often used to make, or at least support, inferences about population movements in the past. Being in the same language family as

TABLE 4.3
Languages of the Indigenous Peoples of North America (based on Goddard 1996)*

Language Family	Sample Languages
Eskimo-Aleut	Central Alaskan Yupik, Pacific Yupik, Inupiaq, Western Canadian Inuit, Eastern Canadian Inuit, West Greenlandic, East Greenlandic, Aleut
Algic	Blackfoot, Plains Cree, Woods Cree, Attikamek, Naskapi, Montagnais, Arapaho, Cheyenne, Ojibwa, Algonquian, Ottawa, Kickapoo, Shawnee, Micmac, Yurok, Menominee, Saulteaux, Potawatomi, Abenaki, Mohegan-Pequot, Delaware
Nadene	Tlingit, Eyak, Tahltan, Tanana, Tuchone, Kutchin, Han, Dogrib, Kaska, Sekani, Beaver, Slavey, Chipewyan, Carrier, Chilcotin, Navajo, Western Apache, Eastern Apache, Kiowa Apache
Haida	Haida
Wakashan	Haisla, Heiltsuk, Kwakiutl, Nootka, Makah
Salishan	Bella Coola, Comox, Sechelt, Squamish, Halkomelem, Straits, Clallam, Lushootseed, Twana, Chehalis, Kalispel, Columbian, Lillooet, Thompson, Shuswap, Okanagan, Coeur d'Alene
Tsimshianic	Tsimshian, Nishga, Gitksan
Chinookan	Chinook
Utian	Western Miwok, Eastern Miwok, Northern Costanoan, Southern Costanoan
Yokutsan	Palewyami, Buena Vista, Tule-Kaweah, Gashowu, Valley Yokuts
Plateau Penutian	Klamath, Sahaptin, Nez Perce, Molala
Pomoan	Northeastern Pomo, Southeastern Pomo, Eastern Pomo, Northern Pomo, Central Pomo, Southern Pomo, Kashaya
Yana	Yana
Yukian	Yuki, Wappo
Chumashian	Island Chumash, Obispeno, Purisimeno, Ineseno, Barbareno, Ventureno
Uto-Aztecan	Paiute, Shoshone, Comanche, Ute, Hopi
Kiowa-Tanoan	Kiowa, Jemez, Tiwa, Tewa, Piro
Zuni	Zuni
Siouan-Catawba	Hidatsa, Crow, Mandan, Sioux, Assiniboine, Stoney, Omaha-Ponca, Osage, Chiwere, Winnebago, Biloxi, Catawba
Caddoan	Arikara, Pawnee, Wichita, Caddo
Muskogean	Choctaw, Chickasaw, Appalachee, Alabama, Koasati, Creek, Seminole
Natchez	Natchez
Iroquoian	Huron, Laurentian, Seneca, Cayuga, Mohawk, Oneida, Cherokee

^{*} Note: this table only lists 24 of 62 language families, and a small proportion of over 400 recognized languages. The languages included here are those that non-specialists are most likely to recognize. Those interested in the complete classification are directed to Goddard (1996). The names of some of the languages reflect older spellings or pronunciations in keeping with the standard of the *Handbook of North American Indians*, upon which this table is based.

Beothuk

Beothuk

many languages of the Indigenous groups of western Canada, for example, the languages of the Apache and Navajo support the presumed migrations of those groups from Canada to the American Southwest in the late prehistoric period.

In some cases, languages of various groups are so different that some researchers choose to use much larger distinctions in classification, linking language families into more comprehensive categories such as language phyla. Some researchers propose that the differences between the languages of some groups, even those living in the same regions, are as different from each other as English is to Mandarin or Cantonese. One of the implications is that the substantial differences in languages may reflect multiple migrations to, and within, North America during the prehistoric period.

STUDYING TRADITIONAL LIFEWAYS

In the anthropology of the Indigenous peoples of North America, "traditional lifeways" is usually used to refer to a group's cultural patterns as they existed at AD 1500, or otherwise immediately before the arrival of Europeans. These lifeways include all aspects of culture, including those related to the economic, social, political, and ideological spheres of culture. Although many aspects of Indigenous cultures have changed substantially since the arrival of Europeans, many have not. Many traditional lifeways, especially those related to social and ideological aspects of culture, have persisted through the historic period to contemporary times.

This section outlines the basic methods of reconstructing lifeways as they were immediately before the arrival of Europeans. Chapter 5 provides an overview of the lifeways from that time. Change in lifeways that resulted from the impact of Europeans is covered in Chapter 6, and the persistence of some of the traditional lifeways in contemporary times is included in Chapter 7.

The principal method of anthropological research into traditional lifeways has been **recall ethnography**. Although it was rarely made explicit, it was mostly recall ethnography that Franz Boas and other anthropologists of the late nineteenth and early twentieth centuries were practicing, resulting in the many ethnographies written during that period. The basic technique of recall ethnography consisted of ethnographers working closely with one of more elders or other people in a group who were knowledgeable about that group's life in the past. The people would inform the anthropologist about traditional lifeways based on what they had been told, their own memories, oral history, and personal experience. Potential problems with recall ethnography include faulty memories of informants, informant bias, and deliberate attempts to deceive anthropologists.



FIGURE 4.3 Archaeological Excavation. Excavations often provide key information for reconstructing cultures as they were at AD 1500. (Photo © Barry D. Kass@ImagesofAnthropology.com. Reprinted by permission.)

Many anthropologists using recall ethnography presented the results of their research (i.e., listening to informants) as if the lifeways being described were still being practiced in the present. The ethnographies were written as if they were based on the anthropologists' own observations rather than being recalled by one or more informants; and, as the informants were reflecting on earlier times, they rarely described any kind of European influence. This is often referred to as writing in the **ethnographic present**, which is usually taken to mean describing cultural patterns of the past (i.e., pre-European times in North America) in ways that suggest they are being practiced in the present. Others have described this practice of portraying the Indigenous cultures in the 1800s and 1900s as they were presumed to have existed immediately before the arrival of Europeans as "ethnographic taxidermy."

Other methods of reconstructing lifeways as they were immediately before the arrival of Europeans include oral histories, ethnohistoric documents, and archaeology. Archaeology, in particular, is often used in support of ethnography, oral tradition, and ethnohistory. Archaeologists, for example, can use the archaeological record of sites, artifacts, and ecofacts to not only determine the precise dates of events, but also to reconstruct

virtually every aspect of a culture. Basically, the more lines of evidence used in support of an interpretation, the better.

Concept of Culture Area

Culture area is a core concept in anthropology, and is particularly useful for studying the traditional lifeways of the Indigenous cultures of North America. A "culture area" may be defined as a geographic area in which separate societies have similar cultures. Many separate societies, each with its own distinctive culture, exist in a single culture area. Despite there being many cultural distinctions between the groups of any particular area, when taken as a whole, the lifeways of all those within a single culture area contrast with the lifeways of Indigenous groups in other culture areas.

The use of the "culture area" concept is not without controversy. The term has a long history in North American anthropology, with the basic concept originating in the late 1800s and being further developed and gaining wide use in the early 1900s. It remains in wide use in studies with a focus on traditional lifeways.

Advocates of the concept, past and present, suggest that it is an excellent heuristic device, allowing researchers to put order into considerable cultural diversity around the continent, which in turn enables them to compare and understand cultures. In this regard the concept is particularly useful when focusing on ecological adaptations, and it works well for those who see cultures as primarily an adaptation to the environment.

Those who criticize the use of the concept tend to focus on the problems occurring with the oversimplification of complex phenomena (i.e., cultures), and recognize that while "culture area" is useful for providing generalizations, it remains an arbitrary, artificial construct that fails to adequately consider a number of factors, including the diversity of cultures within regions; the way environments change; the way cultures change; the many cases where a group may exhibit a combination of traits characteristic of different culture areas; and many other exceptions. Critics also point out the problem of lack of a consensus on how to define the distinguishing natural and cultural characteristics of culture areas. Thus, the defining characteristics of a culture area may change from researcher to researcher.

Despite criticism of the concept, most contemporary anthropologists interested in the traditional lifeways of North American Indigenous peoples continue to use "culture area," although they recognize its limitations. There is no universal agreement on the number or defining characteristics of each culture area, but most recognize that there are ten areas, as illustrated in Figure 4.4. Well-known Indigenous groups of each area are listed

FIGURE 4.4 Culture Areas of North America



TABLE 4.4
Major Indigenous Groups, by Culture Area*

ARCTIC Aleut, Eskimo, Inuit SUBARCTIC Beothuk, Chipewyan, Cree, Dene (Athapaskan), Dogrib, Kaska, Innu, Micmac, Northern Algonkians NORTHWEST COAST Bella Coola (Nuxalk), Chinook, Coast Salish, Eyak, Haida, Kwakiutl (Kwakwaka'wakw), Makah, Nisga'a, Nootka (Nuuchah-nulth), Tlingit, Tsmishian, Yurok PLATEAU Coeur d'Alene, Interior Salish (Shuswap, Lillooet, Thompson, Okanagan), Nez Perce, Spokane, Yakama GREAT BASIN Bannock, Paiute, Shoshoni, Ute, Washo CALIFORNIA Chumash, Miwok, Modoc, Ohlone, Patwin, Pomo, Salinan, Wintun, Yahi, Yana, Yokut, Yorok PLAINS Arapaho, Blackfoot, Blood, Cheyenne, Comanche, Crow, Dakota, Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca, Shawnee, Winnebago, Wyandot		
Innu, Micmac, Northern Algonkians NORTHWEST COAST Bella Coola (Nuxalk), Chinook, Coast Salish, Eyak, Haida, Kwakiutl (Kwakwaka'wakw), Makah, Nisga'a, Nootka (Nuuchah-nulth), Tlingit, Tsmishian, Yurok PLATEAU Coeur d'Alene, Interior Salish (Shuswap, Lillooet, Thompson, Okanagan), Nez Perce, Spokane, Yakama GREAT BASIN Bannock, Paiute, Shoshoni, Ute, Washo CALIFORNIA Chumash, Miwok, Modoc, Ohlone, Patwin, Pomo, Salinan, Wintun, Yahi, Yana, Yokut, Yorok PLAINS Arapaho, Blackfoot, Blood, Cheyenne, Comanche, Crow, Dakota, Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	ARCTIC	Aleut, Eskimo, Inuit
Kwakiutl (Kwakwaka'wakw), Makah, Nisga'a, Nootka (Nuu- chah-nulth), Tlingit, Tsmishian, Yurok PLATEAU Coeur d'Alene, Interior Salish (Shuswap, Lillooet, Thompson, Okanagan), Nez Perce, Spokane, Yakama GREAT BASIN Bannock, Paiute, Shoshoni, Ute, Washo CALIFORNIA Chumash, Miwok, Modoc, Ohlone, Patwin, Pomo, Salinan, Wintun, Yahi, Yana, Yokut, Yorok PLAINS Arapaho, Blackfoot, Blood, Cheyenne, Comanche, Crow, Dakota, Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	SUBARCTIC	
Okanagan), Nez Perce, Spokane, Yakama GREAT BASIN Bannock, Paiute, Shoshoni, Ute, Washo CALIFORNIA Chumash, Miwok, Modoc, Ohlone, Patwin, Pomo, Salinan, Wintun, Yahi, Yana, Yokut, Yorok PLAINS Arapaho, Blackfoot, Blood, Cheyenne, Comanche, Crow, Dakota, Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	NORTHWEST COAST	Kwakiutl (Kwakwaka'wakw), Makah, Nisga'a, Nootka (Nuu-
CALIFORNIA Chumash, Miwok, Modoc, Ohlone, Patwin, Pomo, Salinan, Wintun, Yahi, Yana, Yokut, Yorok PLAINS Arapaho, Blackfoot, Blood, Cheyenne, Comanche, Crow, Dakota, Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	PLATEAU	
Wintun, Yahi, Yana, Yokut, Yorok PLAINS Arapaho, Blackfoot, Blood, Cheyenne, Comanche, Crow, Dakota, Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	GREAT BASIN	Bannock, Paiute, Shoshoni, Ute, Washo
Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee, Piegan, Sioux, Wichita SOUTHWEST Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	CALIFORNIA	
SOUTHEAST Alabama, Caddo, Catawa, Cherokee, Chickasaw, Choctaw, Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	PLAINS	Lakota, Hidatsa, Iowa, Kiowa, Mandan, Osage, Pawnee,
Creek, Natchez, Seminole NORTHEAST Algonquin, Cayuga, Chippewa, Erie, Ojibwa, Delaware, Huron, Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	SOUTHWEST	Acoma, Apache, Hopi, Navajo, Pima, Tohono O'Odham, Zuni
Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,	SOUTHEAST	
	NORTHEAST	Illinois, Iroquois, Kickapoo, Mahican, Menominee, Miami, Micmac, Mohawk, Oneida, Onondaga, Ottawa, Pequot, Seneca,

^{*} Note: this is a generalized overview of the major well-known Indigenous groups of each culture area at approximately AD 1500. It is not comprehensive, and many groups are not listed. Since there is no consensus on the boundaries of culture areas, and since some groups had traditional territory in more than one area, groups may be listed in more than one area. Mostly, the historic names of groups are used. The list includes alternate names or subgroups of larger ethnic groups (e.g., the Dakota as a subgroup of the Sioux).

in Table 4.4 and the physical characteristics of each area are described in the following paragraphs.

Arctic: The Arctic is the northernmost culture area of North America, incorporating northern Alaska, much of Northern Canada, and Greenland. It runs east-west across the entire continent and is bordered on the south by the Subarctic. It is characterized by long, cold winters and short, mild summers, with little plant life that is useful as food for humans, moderate amounts of game animals in some areas, and considerable sea mammals. The northern parts of the Arctic have limited land resources but the southern portion includes tundra, providing a suitable habitat for caribou and other game animals. Natural resources include plentiful sea mammals off the coasts and islands; and caribou and other game animals in the southern inland areas.

Subarctic: Lying south of the Arctic, the Subarctic encompasses much of the rest of Canada. It is bordered by the Northwest Coast, Plateau, Plains, and Northeast culture areas. The physical environment is characterized by boreal forest, tundra, cold winters, and mild summers. Natural resources include moose, caribou, deer, and other game animals, and a diverse array of vegetation useful for food and shelter.

Northwest Coast: The Northwest Coast comprises a relatively thin strip on the Pacific Coast, beginning in Alaska and extending south along the coasts of British Columbia, Washington, and Oregon to northern California. The area is physically characterized by a rugged, mountainous coastline, a mild and wet climate, and plentiful natural resources, especially salmon and cedar. To the north it is bordered by the Subarctic. To the east lies the Subarctic and Plateau culture areas, and to the south is the California culture area. Plants and animals are extremely diverse and abundant.

California: California exhibits perhaps the greatest environmental diversity of all of these culture areas. The area extends southward from the northern part of the state, west of the Sierras. It is bordered by the Northwest Coast, Great Basin, and Southwest culture areas. Natural resources include a tremendous variety of foods, including both maritime and terrestrial mammals, and a wide diversity of plant foods such as acorns and berries.

Plateau: The Plateau includes the southern interior of British Columbia, as well as parts of Washington, Oregon, Montana, and Idaho. It is drained by the Fraser and Columbia rivers, both of which contain abundant salmon on annual migrations. It is bordered by the Subarctic, the Plains, the Great Basin, and the Northwest Coast. There are abundant varieties of edible plants and animals.

Great Basin: The Great Basin includes Nevada, Utah, and portions of Washington, Oregon, Idaho, Wyoming, and Colorado. It is characterized as a large, arid environment consisting of mountain ranges and more than 100 basins. Natural resources are few, producing a relatively low carrying capacity for human populations.

Southwest: The Southwest includes all or portions of the south-west American states, including Arizona, New Mexico, the southern portions of Colorado and Utah, a small portion of south-east California, and northern Mexico. It is bordered by Mesoamerica to the south, the Plains and Great Basin to the north, and California to the west. The area includes tributaries of the Colorado and Rio Grande rivers. A variety of environmental zones exist in the Southwest, but it is generally characterized by a hot and dry climate, which includes deserts. Although the area is dry, plants and animals are still plentiful.

Plains: The Plains includes the southern parts of the Canadian Prairie Provinces of Alberta, Saskatchewan, and Manitoba, and extends south from Minnesota and the Dakotas through the central states to Texas and the Gulf of Mexico. East to west, it extends from the Mississippi Valley to the Rocky Mountains. It is bordered by the Subarctic, Plateau, Great Basin, Southwest, Southeast, and Northeast. It is physically characterized by a relatively flat landscape covered mostly with grasslands. Natural resources include buffalo.

Northeast: The Northeast includes the north-east American states and the south-east part of Canada, including the Great Lakes area. It extends from southern Ontario to the Canadian Maritime provinces (Nova Scotia, New Brunswick, and Prince Edward Island). In the US it extends eastward from Ohio to the New England states. It is bordered by the Subarctic, Plains, and Southeast culture areas. The environment was mostly forested in prehistoric times, with cold winters and warm summers.

Southeast: The Southeast culture area includes the south-eastern American states, extending from Illinois east to Virginia, south to Florida, and west to Louisiana and eastern Texas. It is bordered by the Plains and Northeast culture areas. The area was naturally forested in prehistoric times, but many groups kept parts of it cleared to facilitate farming and easier hunting. The environment also included marshes and everglades.

MAJOR AREAS OF INTEREST IN THE STUDY OF TRADITIONAL LIFEWAYS AT AD 1500

The ethnographers of the late nineteenth and early twentieth centuries usually attempted to address each of the major aspects of traditional lifeways, at least as they were considered at that time. There was no template used by these ethnographers, but in general the focus was on subsistence strategy, diet, settlement patterns, housing, social systems, political systems, and ideology (see Table 4.5). Lesser attention was devoted to technology, material culture, arts, and exchange within and between groups. Following are the basic concepts and terminology used by anthropologists in describing these aspects of culture.

Subsistence strategy refers to the way people get their food. Major strategies being used by Indigenous people at AD 1500 included **generalized foraging**, **specialized** (or complex) **foraging**, and **horticulture**. Early ethnographers usually described how people got their food, but these descriptions were often not very detailed and did not use the terminology that is in use today.

Diet refers to the specific foods that people ate. Describing the diet of people before the arrival of Europeans was a standard feature of early ethnographies, and was often very detailed.

TABLE 4.5

Major Areas of Anthropological Interest in the Study of Traditional Lifeways

Subsistence Strategy

Focusing on how people get their food.

Diet

Focusing on what plants and animals they were eating.

Settlement Patterns

Focusing on how sites were distributed across the landscape and when they were used.

Housing

Focusing on the structure and function of houses.

Social Systems

Focusing on marriage and family patterns, and on ways of tracing descent, kinship, and social inequality.

Political Systems

Focusing on how groups were organized, such as bands, tribes, or chiefdoms.

Ideology

Focusing on belief systems, mythology, shamanism, ritual, values, and world view.

The Arts

Focusing on both the visual and performing arts.

Technology

Focusing on how people made things like artifacts and houses, as well as how they did things like hunting and cooking.

Settlement patterns has various meanings, ranging from the general distribution of sites on the landscape to the use of traditional territories, to the layout of specific settlements. Common patterns at AD 1500 included highly mobile (or nomadic); semi-sedentary; and sedentary. Early ethnographies typically included descriptions of how people used their landscapes, including general movements through their territories at various times of the year.

Housing refers to the habitation structures of people. Most early ethnographies provide descriptions of the structures commonly in use before the arrival of Europeans.

Social systems, also known as social strategies, social organization, and social institutions, refers to the way people relate to each other. The term includes aspects of kinship, descent, marriage and family patterns, social stratification, and ways of maintaining social control. Many early ethnographies devoted considerable amounts of description to social systems, including the various kinds of kinship and descent groups (e.g., lineages and clans), ways of tracing descent (e.g., matrilineal or patrilineal), and patterns of social stratification (e.g., egalitarian or stratified).

Political systems, also known as political strategies, political organization, and political institutions, refers to the way people maintain order within and between groups. Common types of political systems in North America at AD 1500 included bands, tribes, and **chiefdoms**. Political systems were typically described in early ethnographies.

Ideology refers to beliefs and values. Principal components of ideology include mythology, shamanism, and ritual. Most early ethnographies included substantial description of ideology, including the documentation of many myths.

Arts refers to both the visual and performing arts. Visual arts include painting, carving, sculpture, and design elements. The art may be standalone, such as rock art and totem poles, or it may be incorporated as design elements in pottery, baskets, and other artifacts and habitation structures. Performing arts include dance, music, and song. All Indigenous groups had art in AD 1500. Many early ethnographers included descriptions of art, but it was usually a minor part of their ethnographies.

Technology refers to the way people make things, such as how they make their tools and houses. Early ethnographies usually paid relatively little attention to technology. When it was described it often focused solely on the building of houses.

STUDYING POPULATION, LANGUAGES, AND TRADITIONAL LIFEWAYS IN A GLOBAL PERSPECTIVE

The interests of anthropologists and others in studying population, languages, and traditional lifeways of Indigenous peoples at AD 1500 are shared around the world by those interested in Indigenous peoples without written records, and especially by those researchers focusing on the impacts of European incursions and colonialism.

The methods used by anthropologists and others in attempting to reconstruct late prehistoric and early historic period populations of Indigenous peoples are no different in North America than they are elsewhere. Similarly, issues related to determining the number and classification of languages are common elsewhere.

The concept of "culture area" as it is used by North American anthropologists is rare outside of North America. Its use remains primarily restricted to studies of the Indigenous peoples and cultures of North America in late prehistoric and early historic times. Anthropologists elsewhere recognize and use broad categories, such as "North America" and "Mesoamerica," to recognize the broad and comprehensive distinctions that characterize regions on very large scales, but the degree to which the concept of culture area is used in North America is not common elsewhere.

SUGGESTED READINGS

The Smithsonian Institution's *Handbook of North American Indians*, under the general editorship of William Sturtevant, is an excellent source. *Volume 3: Environment, Origins, and Populations*, edited by Douglas Ubelaker (2006), includes multiple contributions on populations. *Volume 17: Languages*, edited by Ives Goddard (1996), is devoted entirely to Indigenous languages of North America.