

Prologue. At the Airport

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An airport scene

April 30, 2006, 7:00 AM. I'm in an airport's check-in hall, gripping my baggage cart while being jostled by a crowd of other people also checking in for that morning's first flights. The scene is familiar: hundreds of travelers carrying suitcases, boxes, backpacks, and babies, forming parallel lines approaching a long counter, behind which stand uniformed airline employees at their computers. Other uniformed people are scattered among the crowd: pilots and stewardesses, baggage screeners, and two policemen swamped by the crowd and standing with nothing to do except to be visible. The screeners are X-raying luggage, airline employees tag the bags, and baggage handlers put the bags onto a conveyor belt carrying them off, hopefully to end up in the appropriate airplanes. Along the wall opposite the check-in counter are shops selling newspapers and fast food. Still other objects around me are the usual wall clocks, telephones, ATM's, escalators to the upper level, and of course airplanes on the runway visible through the terminal windows.

The airline clerks are moving their fingers over computer keyboards and looking at screens, punctuated by printing credit-card receipts at credit-card terminals. The crowd exhibits the usual mixture of good humor, patience, exasperation, respectful waiting on line, and greeting friends. When I reach the head of my line, I

show a piece of paper (my flight itinerary) to someone I've never seen before and will probably never see again (a check-in clerk). She in turn gives me a piece of paper giving me permission to fly hundreds of miles to a place where I've never been before, and whose inhabitants don't know me but will nevertheless tolerate my arrival.

To travelers from the U.S., Europe, or Asia, the first feature that would strike them as distinctive about this otherwise familiar scene is that all the people in the hall except myself and a few other tourists are New Guineans. Other differences noted by overseas travelers are that the national flag over the counter is not the Stars and Stripes but the black, red, and gold flag of the nation of Papua New Guinea, displaying a bird of paradise and the constellation of the Southern Cross; the counter airline signs don't say American Airlines or British Airways but Air Niugini; and the names of the flight destinations on the screens have an exotic ring: Wapenamanda, Goroka, Kikori, Kundiawa, and Wewak.

The airport at which I was checking in that morning was that of Port Moresby, capital of Papua New Guinea. To anyone with a sense of New Guinea's history – including me, who first came to Papua New Guinea in 1964 when it was still administered by Australia – the scene was at once familiar, astonishing, and moving. I found myself mentally comparing the scene with the photographs taken by the first Australians to enter and “discover” New Guinea's Highlands in 1931, teeming with a million New Guinea villagers still then using stone tools. In those photographs the Highlanders, who had been living for millennia in relative isolation with limited knowledge of an outside world, stare in horror at their first sight of Europeans. I looked at the faces of those New Guinea passengers, counter clerks, and pilots at Port Moresby airport in 2006, and I saw in them the faces of the New Guineans

photographed in 1931. The people standing around me in the airport were of course not the same individuals of the 1931 photographs, but their faces were similar, and some of them may have been their children and grandchildren.

The most obvious difference between that 2006 check-in scene etched in my memory, and the 1931 photographs of “First Contact,” is that New Guinea Highlanders in 1931 were scantily clothed in grass skirts, net bags over their shoulders, and headdresses of bird feathers, but in 2006 they wore the standard international garb of shirts, trousers, skirts, shorts, and baseball caps. Within a generation or two, and within the individual lives of many people in that airport hall, New Guinea Highlanders learned to write, use computers, and fly airplanes. Some of the people in the hall might actually have been the first people in their tribe to have learned reading and writing. That generation gap was symbolized for me by the image of two New Guinea men in the airport crowd, the younger leading the older: the younger in a pilot’s uniform, explaining to me that he was taking the older one, his grandfather, for the old man’s first flight in an airplane; and the gray-haired grandfather looking almost as bewildered and overwhelmed as the people in the 1931 photos.

But an observer familiar with New Guinea history would have recognized bigger differences between the 1931 and 2006 scenes, beyond the fact that people wore grass skirts in 1931 and Western garb in 2006. New Guinea Highland societies in 1931 lacked not just manufactured clothing but also all modern technologies, from clocks, phones, and credit cards to computers, escalators, and airplanes. More fundamentally, the New Guinea Highlands of 1931 lacked writing, metal, money, schools, and centralized government. If we didn’t actually have recent history to tell

us the result, we might have wondered: could a society without writing really master it within a single generation?

An attentive observer familiar with New Guinea history would have noted still other features of the 2006 scene shared with other modern airport scenes but different from the 1931 Highland scenes captured in the photographs made by the First Contact patrols. The 2006 scene contained a higher proportion of gray-haired old people, relatively fewer of whom survived in traditional Highland society. The airport crowd, while initially striking a Westerner without previous experience of New Guineans as “homogenous” – all of them similar in their dark skins and coiled hair – was heterogeneous in other respects of their appearance: tall lowlanders from the south coast, with sparse beards and narrower faces; shorter, bearded, wide-faced Highlanders; and islanders and north coast lowlanders with somewhat Asian-like facial features. In 1931 it would have been utterly impossible to encounter Highlanders, south coast lowlanders, and north coast lowlanders together; any gathering of people in New Guinea would have been far more homogenous than that 2006 airport crowd. A linguist listening to the crowd would have distinguished dozens of languages, falling into very different groups: tonal languages with words distinguished by pitch as in Chinese, Austronesian languages with relatively simple syllables and consonants, and non-tonal Papuan languages. In 1931 one could have encountered individual speakers of several different languages together, but never a gathering of speakers of dozens of languages. Two widespread languages, English and Tok Pisin (also known as Neo-Melanesian or Pidgin English), were the languages being used in 2006 at the check-in counter and also for many of the conversations among passengers, but in 1931 all conversations throughout the New Guinea Highlands were in local languages each of them confined to a small area.

Another subtle difference between the 1931 and 2006 scenes was that the 2006 crowd included some New Guineans with an unfortunately common American body type: overweight people with “beer bellies” hanging over their belts. The photos of 75 years ago show not even a single overweight New Guinean: everybody was lean and muscular. If I could have interviewed the physicians of those airport passengers, then (to judge from modern New Guinea public health statistics) I would have been told of a growing number of cases of diabetes linked to being overweight, plus cases of hypertension, heart disease, stroke, and cancers unknown a generation ago.

Still another distinction of the 2006 crowd compared to the 1931 crowds was a feature that we take for granted in the modern world: most of the people crammed into that airport hall were strangers who had never seen each other before, but there was no fighting going on among them. That would have been unimaginable in 1931, when encounters with strangers were rare, dangerous, and likely to turn violent. Yes, there were those two policemen in the airport hall, supposedly to maintain order, but in fact the crowd maintained order by itself, merely because the passengers knew that none of those other strangers was about to attack them, and that they lived in a society with more policemen and soldiers on call in case a quarrel should get out of hand. In 1931 police and government authority didn’t exist. The passengers in the airport hall enjoyed the right to fly or travel by other means to Wapenamanda or elsewhere in Papua New Guinea without requiring permission. In the modern Western world we have come to take the freedom to travel for granted, but previously it was exceptional. In 1931 no New Guinean born in Goroka had ever visited Wapenamanda a mere 107 miles to the west; the idea of traveling from Goroka to Wapenamanda, without being killed as an unknown stranger within the first 10 miles from Goroka, would have been unthinkable. Yet I had just traveled 7,000 miles from Los Angeles to Port Moresby, a

distance hundreds of times greater than the cumulative distance that any traditional New Guinea Highlander would have gone in the course of his or her lifetime from his or her birthplace.

All of those differences between the 2006 and 1931 crowds can be summed up by saying that, in the last 75 years, the New Guinea Highland population has raced through changes that took thousands of years to unfold in much of the rest of the world. For individual Highlanders, the changes have been even quicker: some of my New Guinea friends have told me of making the last stone axes and participating in the last traditional tribal battles a mere decade before I met them. Today, citizens of industrial states take for granted the features of the 2006 scene that I mentioned: metal, writing, machines, airplanes, police and government, overweight people, meeting strangers without fear, heterogeneous populations, and so on. But all those features of modern human societies are relatively new in human history. For most of the 6,000,000 years since the proto-human and proto-chimpanzee evolutionary lines diverged from each other, all human societies lacked metal and all those other things. Those modern features began to appear only within in the last 11,000 years, in just certain areas of the world.

Thus, New Guinea*

FOOTNOTE

The terminology that has been applied to New Guinea is confusing. Throughout this book, I use the term “New Guinea” to refer to the island of New Guinea, the world’s second largest island after Greenland, lying near the equator just north of Australia. I refer to the island’s diverse indigenous peoples as “New Guineans.” As a result of accidents of 19th-century colonial history, the island is now divided politically between two nations. The island’s eastern half, along with many adjacent smaller

islands, forms the independent nation of Papua New Guinea, which arose from a former German colony in the northeast and a former British colony in the southeast and became administered by Australia until independence in 1975. Australians referred to the former German and British parts as New Guinea and Papua, respectively. The island's western half, formerly part of the Dutch East Indies, has been since 1969 a province (renamed Papua, formerly Irian Jaya) of Indonesia. My own field work in New Guinea has been divided almost equally between the two political halves of the island.

END FOOTNOTE

is in some respects a window onto the human world as it was until a mere yesterday, measured against a time scale of the 6,000,000 years of human evolution. (I emphasize "in some respects" – of course the New Guinea Highlands of 1931 were not an unchanged world of yesterday). All those changes that came to the Highlands in the last 75 years have also come to other societies throughout the world, but in much of the rest of the world those changes appeared earlier and much more gradually than in New Guinea. "Gradual," however, is relative: even in those societies where the changes appeared first, their time depth of less than 11,000 years is still miniscule in comparison with 6,000,000 years. Basically, our human societies have undergone profound changes recently and rapidly.

Why study traditional societies

Why do we find "traditional" societies so fascinating?***

FOOTNOTE

By the terms “traditional” or “small-scale” societies, which I shall use throughout this book, I mean past and present societies living at low population densities in small groups ranging from a few dozen to a few thousand people, subsisting by hunting/gathering or by farming or herding, and transformed to a limited degree by contact with large, Westernized, industrial societies. In reality, all such traditional societies still existing today have been at least partly modified by contact, and could alternatively be described as “transitional” rather than “traditional” societies, but they often still retain many features and social processes of the small societies of the past. I contrast traditional small-scale societies with “Westernized” societies, by which I mean the large modern industrial societies run by state governments, familiar to readers of this book as the societies in which most of my readers now live. They are termed “Westernized” because important features of those societies (such as the Industrial Revolution and public health) arose first in Western Europe in the 1700’s and 1800’s, and spread from there overseas to many other countries.

END FOOTNOTE

Partly, it’s because of their human interest: the fascination of getting to know people who are so similar to us and understandable in some ways, and so unlike us and hard to understand in other ways. When I arrived in New Guinea for the first time, in 1964 at the age of 26, I was struck by the exoticness of New Guineans: they look different from Americans, speak different languages, dress differently, and behave differently. But over the subsequent decades, in the course of my making dozens of visits of one to five months each to many parts of New Guinea and neighboring islands, that predominant sense of exoticness yielded to a sense of common ground as I came to know individual New Guineans: we hold long conversations, laugh at the same jokes, share interests in children and sex and food and sports, and find ourselves angry,

frightened, grief-stricken, relieved, and exultant together. Even their languages are variations on familiar worldwide linguistic themes: although the first New Guinea language that I learned (Fore) is unrelated to Indo-European languages and hence had a vocabulary completely unfamiliar to me, Fore still conjugates verbs elaborately like German, and it has dual pronouns like Slovenian, postpositions like Finnish, and three demonstrative adverbs (“here,” “there nearby,” and “there faraway”) like Latin.

All those similarities misled me, after my initial sense of New Guinea’s exoticness, into thinking, “People are basically all the same everywhere.” No, I eventually came to realize, in many basic ways we are not all the same: many of my New Guinea friends count differently (by visual mapping rather than by abstract numbers), select their wives or husbands differently, treat their parents and their children differently, view danger differently, and have a different concept of friendship. This confusing mixture of similarities and differences is part of what makes traditional societies fascinating to an outsider.

Another reason for the interest and importance of traditional societies is that they retain features of how all of our ancestors lived for tens of thousands of years, until virtually yesterday. Traditional lifestyles are what shaped us and caused us to be what we are now. The shift from hunting/gathering to farming began only about 11,000 years ago; the first metal tools were produced only about 7,000 years ago; and the first state government and the first writing arose only around 5,400 years ago. “Modern” conditions have prevailed, even just locally, for only a tiny fraction of human history; all human societies have been traditional for far longer than any society has been modern. Today, readers of this book take for granted farm-grown and store-bought food rather than wild food hunted and gathered daily, tools of metal rather than of stone and wood and bone, state government and its associated law

courts and police and armies, and reading and writing. But all of those seeming necessities are relatively new, and billions of people around the world today still live in partly traditional ways.

Embedded even within modern industrial societies are realms where many traditional mechanisms still operate. In many rural areas of the First World, such as the Montana valley where my wife and children and I spend our annual summer vacations, many disputes are still resolved by traditional informal mechanisms rather than by going to court. Urban gangs in large cities don't call the police to settle their disagreements but rely on traditional methods of negotiation, compensation, intimidation, and war. European friends of mine who grew up in small European villages in the 1950's described childhoods like those in a traditional New Guinea village: everybody knew everybody else in the village, everyone knew what everyone else was doing and expressed their opinions about it, people married spouses born only a mile or two distant, people spent their entire lives in or near the village except for young men away during the world war years, and disputes within the village had to be settled in a way that restored relationships or made them tolerable, because you were going to be living near that person for the rest of your life. That is, the world of yesterday wasn't erased and replaced by a new world of today: much of yesterday is still with us. That's another reason for wanting to understand yesterday's world.

As we shall see in this book's chapters, traditional societies are far more diverse in many of their cultural practices than are modern industrial societies. Within that range of diversity, many cultural norms for modern state societies are far displaced from traditional norms and lie towards the extremes of that traditional range of diversity. For example, compared to any modern industrial society, some traditional societies treat elderly people much more cruelly, others offer elderly

people much more satisfying lives; modern industrial societies are closer to the former extreme than to the latter. Yet psychologists base most of their generalizations about human nature on studies of our own narrow and atypical slice of human diversity. Among the human subjects studied in a sample of papers from the top psychology journals surveyed in the year 2008, 96% were from Westernized industrial countries (North America, Europe, Australia, New Zealand, and Israel), 68% were from the U.S. in particular, and up to 80% were college undergraduates enrolled in psychology courses, i.e., not even typical of their own national societies. That is, as social scientists Joseph Henrich, Stephen Heine, and Ara Norenzayan express it, most of our understanding of human psychology is based on subjects who may be described by the acronym WEIRD: from Western, educated, industrialized, rich, and democratic societies. Most subjects also appear to be literally weird by the standards of world cultural variation, because they prove to be outliers in many studies of cultural phenomena that have sampled world variation more broadly. Those sampled phenomena include visual perception, fairness, cooperation, punishment, biological reasoning, spatial orientation, analytic versus holistic reasoning, moral reasoning, motivation to conform, making choices, and concept of self. Hence if we wish to generalize about human nature, we need to broaden greatly our study sample from the usual WEIRD subjects (mainly American psychology undergraduates) to the whole range of traditional societies.

While social scientists can thus surely draw conclusions of academic interest from studies of traditional societies, all the rest of us may also be able to learn things of practical interest. Traditional societies in effect represent thousands of natural experiments in how to construct a human society. They have come up with thousands of solutions to human problems, solutions different from those adopted by our own

WEIRD modern societies. We shall see that some of those solutions – for instance, some of the ways in which traditional societies raise their children, treat their elderly, remain healthy, talk, spend their leisure time, and settle disputes – may strike you, as they do me, as superior to normal practices in the First World. Perhaps we could benefit by selectively adopting some of those traditional practices. Some of us already do so, with demonstrated benefits to our health and happiness. In some respects we moderns are misfits; our bodies and our practices now face conditions different from those under which they evolved, and to which they became adapted.

But we should also not go to the opposite extreme of romanticizing the past and longing for simpler times. Many traditional practices are ones that we can consider ourselves blessed to have discarded – such as infanticide, abandoning or killing elderly people, facing periodic risk of starvation, being at heightened risk from environmental dangers and infectious diseases, often seeing one’s children die, and living in constant fear of being attacked. Traditional societies may not only suggest to us some better living practices, but may also help us appreciate some advantages of our own society that we take for granted.

States

Traditional societies are more varied in their organization than are societies with state government.*

FOOTNOTE

Throughout this book, I’ll use the word “state” not only with its usual meaning of “condition” (e.g., “he was reduced to a state of poverty”), but also with its technical

political meaning of a large society with centralized bureaucratic government, as described below.

END FOOTNOTE

As a starting point to help us understand unfamiliar features of traditional societies, let's remind ourselves of the familiar features of the nation-states in which we now live.

Most modern nations have populations of hundreds of thousands or millions of people, ranging up to over a billion people each for India and China, the two most populous modern nations. Even the smallest separate modern nations, the Pacific island countries of Nauru and Tuvalu, each contain over 10,000 people. (The Vatican, with a population of only 1,000 people, is also classified as a nation, but it's exceptional as a tiny enclave within the city of Rome, from which the Vatican imports all of its necessities). In the past as well, states had populations ranging from tens of thousands up to millions. Those large populations already suffice to tell us how states have to feed themselves, how they have be organized, and why they exist at all. All states feed their citizens primarily by means of food production (agriculture and herding) rather than by hunting and gathering. One can obtain far more food by growing crops or livestock on an acre of garden, field, or pasture that we have filled with the plant and animal species most useful to us, than by hunting and gathering whatever wild animal and plant species (most of them inedible) happen to live in an acre of forest. For that reason alone, no hunter/gatherer society has ever been able to feed a sufficiently dense population to support a state government. In any state, only a portion of the population – as low as 2% in modern societies with highly mechanized farms -- grows the food. The rest of the population is busy doing other

things (such as governing or manufacturing or trading), doesn't grow its own food, and instead subsists off the food surpluses produced by the farmers.

The state's large population also guarantees that most people within a state are strangers to each other. It's impossible even for citizens of tiny Tuvalu to know all 10,000 of their fellow citizens, and China's 1,400,000,000 citizens would find the challenge even more impossible. Hence states need police, laws, and codes of morality to ensure that the inevitable constant encounters between strangers don't routinely explode into fights. That need for police and laws and moral commandments to be nice to strangers doesn't arise in tiny societies, in which everyone knows everyone else.

Finally, once a society tops 10,000 people, it's impossible to reach, execute, and administer decisions by having all citizens sit down for a face-to-face discussion in which everyone speaks his or her mind. Large populations can't function without leaders who make the decisions, executives who carry out the decisions, and bureaucrats who administer the decisions and laws. Alas for all of you readers who are anarchists and dream of living without any state government, those are the reasons why your dream is unrealistic: you'll have to find some tiny band or tribe willing to accept you, where no one is a stranger, and where kings, presidents, and bureaucrats are unnecessary.

We'll see in a moment that some traditional societies were populous enough to need general-purpose bureaucrats. However, states are even more populous and need specialized bureaucrats differentiated vertically and horizontally. We state citizens find all those bureaucrats exasperating: alas again, they're necessary. A state has so many laws and citizens that one type of bureaucrat can't administer all of the king's laws: there have to be separate tax collectors, motor vehicle inspectors, policemen,

judges, restaurant cleanliness inspectors, and so on. Within a state agency containing just one such type of bureaucrat, we're also accustomed to the fact that there are many officials of that one type, arranged hierarchically on different levels: a tax agency has the tax agent who actually audits your tax return, serving under a supervisor to whom you might complain if you disagree with the agent's report, serving in turn under an office manager, serving under a district or state manager, serving under a Commissioner of Internal Revenue for the whole United States. (It's even more complicated in reality: I omitted several other levels for the sake of brevity). Franz Kafka's novel *The Castle* describes an imaginary such bureaucracy inspired by the actual bureaucracy of the Hapsburg Empire of which Kafka was a citizen. Bedtime reading of Kafka's account of the frustrations faced by his protagonist in dealing with the imaginary castle bureaucracy guarantees me a sleep filled with nightmares, but all of you readers will have had your own nightmares and frustrations from dealing with actual bureaucracies. It's the price we pay for living under state governments: no Utopian has every figured out how to run a nation without at least some bureaucrats.

A remaining all-too-familiar feature of states is that, even in the most egalitarian Scandinavian democracies, citizens are politically, economically, and socially unequal. Inevitably, any state has to have a few political leaders giving orders and making laws, and lots of commoners obeying those orders and laws. State citizens have different economic roles (as farmers, janitors, lawyers, politicians, shop clerks, etc.), and some of those roles carry higher salaries than do other roles. Some citizens enjoy higher social status than do other citizens. All idealistic efforts to minimize inequality within states – e.g., Karl Marx's formulation of the communist ideal "From each according to his abilities, to each according to his needs" – have failed.

There could be no states until there was food production (beginning only around 9000 BC), and still no states until food production had been operating for enough millennia to build up the large dense populations requiring state government. The first state arose in the Fertile Crescent around 3400 BC, and others then arose in China, Mexico, the Andes, Madagascar, and other areas over the following millennia, until today a world map shows the entire planet's land area except for Antarctica divided into states. Even Antarctica is subject to partly overlapping territorial claims by seven nations.

Types of traditional societies

Thus, before 3400 BC there were no states anywhere, and in recent times there have still been large areas beyond state control, operating under traditional simpler political systems. The differences between those traditional societies and the state societies familiar to us are the subject of this book. How should we classify and talk about the diversity of traditional societies themselves?

While every human society is unique, there are also cross-cultural patterns that permit some generalizations. In particular, there are correlated trends in at least four aspects of societies: population size, subsistence, political centralization, and social stratification. With increasing population size and population density, the acquisition of food and other necessities tends to become intensified. That is, more food is obtained per acre by subsistence farmers living in villages than by small nomadic groups of hunter/gatherers, and still more is obtained per acre on the intensive

irrigated plots cultivated by higher-density peoples and on the mechanized farms of modern states. Political decision-making becomes increasingly centralized, from the face-to-face group discussions of small hunter/gatherer groups to the political hierarchies and decisions by leaders in modern states. Social stratification increases, from the relative egalitarianism of small hunter/gatherer groups to the inequality between people in large centralized societies.

These correlations between different aspects of a society aren't rigid: some societies of a given size have more intensified subsistence, or more political centralization, or more social stratification, than do others. But we need some shorthand for referring to the different types of societies emerging from these broad trends, while acknowledging the diversity within these trends. Our practical problem is similar to the problem faced by developmental psychologists discussing differences among individual people. While every human being is unique, there are still broad age-related trends, such that 3-year-olds are on the average different in many correlated respects from 24-year-olds. Yet age forms a continuum with no abrupt cut-offs: there is no sudden transition from being "like a 3-year-old" to being "like a 6-year-old." And there are differences among people of the same age. Faced with these complications, developmental psychologists still find it useful to adopt shorthand categories such as "infant," "toddler," "child," "adolescent," "young adult," etc., while recognizing imperfections of these categories.

Social scientists similarly find it useful to adopt shorthand categories whose imperfections they understand. They face the added complication that changes among societies can be reversed, whereas changes in age classes can't. Farming villages may resort to small hunter/gatherer bands under drought conditions, whereas a 4-year-old will never revert to being a 3-year-old. While most developmental psychologists

agree on recognizing and naming the broadest categories of infant/child/adolescent/adult, social scientists use numerous alternative sets of shorthand categories for describing variation among traditional societies, and some scientists become indignant at the use of any categories at all. In this book I shall occasionally use Elmer Service's division of human societies into four categories of increasing population size, political centralization, and social stratification: band, tribe, chiefdom, and state. While these terms are now 50 years old and other terms have been proposed since then, Service's terms have the advantage of simplicity: four terms to remember instead of seven terms, and single words instead of multi-word phrases. But please remember that these terms are just shorthand useful for discussing the great diversity of human societies, without pausing to reiterate the imperfections in the shorthand terms and the important variation with each category each time that the terms are used in the text.

The smallest and simplest type of society (termed by Service a band) consists of just a few dozen individuals, many of them belonging to one or several extended families (i.e., an adult husband and wife, their children, and some of their parents, siblings, and cousins). Most nomadic hunter/gatherers, and some garden farmers, traditionally lived at low population densities in such small groups. The band members are sufficiently few in number that everyone knows everyone else well, group decisions can be reached by face-to-face discussion, and there is no formal political leadership or strong economic specialization. A social scientist would describe a band as relatively egalitarian and democratic: members differ little in "wealth" (there are few personal possessions anyway) and in political power, except as a result of individual differences in ability or personality, and as tempered by extensive sharing of resources among band members.

Insofar as we can judge from archaeological evidence about the organization of past societies, probably all humans lived in such bands until at least a few tens of thousands of years ago, and most still did as recently as 11,000 years ago. When Europeans began, especially after Columbus's first voyage of AD 1492, to expand around the world and to encounter non-European peoples living in non-state societies, bands still occupied all or most of Australia and the Arctic, plus low-productivity desert and forest environments of the Americas and sub-Saharan Africa. Band societies that will frequently be discussed in this book include the !Kung of Africa's Kalahari Desert, the Ache and Siriono Indians of South America, the Andaman Islanders of the Bay of Bengal, the pygmies of African equatorial forests, and Machiguenga Indian gardeners of Peru. All of the examples mentioned in the preceding sentence except the Machiguenga are or were hunter/gatherers.

Bands grade into the next larger and more complex type of society (termed by Service a tribe), consisting of a local group of hundreds of individuals. That's still just within the group size limit where everyone can know everyone else personally and there are no strangers. For instance, in my high school of about 200 students all students and teachers knew each other by name, but that was impossible in my wife's high school with thousands of students. A society of hundreds means dozens of families, often divided into kinship groups termed clans, which may exchange marriage partners with other clans. The higher populations of tribes than of bands require more food to support more people in a small area, and so tribes usually are farmers or herders or both, but a few are hunter/gatherers living in especially productive environments (such as Japan's Ainu people and North America's Pacific Northwest Indians). Tribes tend to be sedentary, and to live for much or all of the year in villages located near their gardens, pastures, or fisheries. However, Central

Asian herders and some other tribal peoples practice transhumance -- i.e. moving livestock seasonally between different altitudes in order to follow the growth of grass at higher elevations as the season advances.

In other respects tribes still resemble large bands – for instance, in their relative egalitarianism, weak economic specialization, weak political leadership, lack of bureaucrats, and face-to-face decision-making. I’ve watched meetings in New Guinea villages where hundreds of people sit on the ground, manage to have their say, and reach a conclusion. Some tribes have a “big man” who functions as a weak leader, but he leads only by his powers of persuasion and personality rather than by recognized authority. As an example of the limits of a “big man’s” powers, we shall see in Chapter 3 how the ostensible followers of a leader named Gutelu of the New Guinea Dani tribe succeeded in thwarting Gutelu’s will and launching a genocidal attack that split Gutelu’s political alliance. Archaeological evidence of tribal organization, such as remains of substantial residential structures and settlements, suggests that tribes were emerging in some areas by at least 13,000 years ago. In recent times tribes have still been widespread in parts of New Guinea and Amazonia. Tribal societies that I’ll discuss in this

book include Alaska’s Iñupiat, South America’s Yanomamo Indians, Afghanistan’s Kirghiz, New Britain’s Kaulong, and New Guinea’s Dani, Daribi, and Fore.

Tribes then grade into the next stage of organizational complexity, called a chiefdom and containing thousands of subjects. Such a large population, and the incipient economic specialization of chiefdoms, require high food productivity and the ability to generate and store food surpluses for feeding non-food-producing specialists, like the chiefs and their relatives and bureaucrats. Hence chiefdoms have built sedentary villages and hamlets with storage facilities and have mostly been food-

producing (farming and herding) societies, except in the most productive areas available to hunter/gatherers, such as Florida's Calusa chiefdom and coastal Southern California's Chumash chiefdoms.

In a society of thousands of people it's impossible for everyone to know everyone else or to hold face-to-face discussions that include everybody. As a result, chiefdoms face two new problems that did not face bands or tribes. First, strangers in a chiefdom must be able to meet each other, to recognize each other as fellow but individually unfamiliar members of the same chiefdom, and to avoid bristling at territorial trespass and getting into a fight. Hence chiefdoms develop shared ideologies and political and religious identities often derived from the supposedly divine status of the chief. Second, there is now a recognized leader, the chief, who makes decisions, possesses recognized authority, claims a monopoly on the right to use force against his society's members if necessary, and thereby ensures that strangers within the same chiefdom don't fight each other. The chief is assisted by non-specialized all-purpose officials (proto-bureaucrats) who collect tribute and settle disputes and carry out other administrative tasks, instead of there being separate tax collectors, judges, and restaurant inspectors as in a state. (A source of confusion here is that some traditional societies that have chiefs and are correctly described as chiefdoms in the scientific literature and in this book are nevertheless referred to as "tribes" in most popular writing: for instance, Indian "tribes" of eastern North America, which really consisted of chiefdoms).

An economic innovation of chiefdoms is termed a redistributive economy: instead of just direct exchanges between individuals, the chief collects tribute of food and labor, much of which is redistributed to warriors, priests, and craftsmen who serve the chief. Redistribution is thus the earliest form of a system of taxation to

support new institutions. Some of the food tribute is returned to the commoners, whom the chief has a moral responsibility to support in times of famine, and who work for the chief at activities like constructing monuments and irrigation systems. In addition to these political and economic innovations beyond the practices of bands and tribes, chiefdoms pioneered the social innovation of institutionalized inequality. While some tribes already have separate lineages, a chiefdom's lineages are ranked hereditarily, with the chief and his family being at the top, commoners or slaves at the bottom, and (in the case of Polynesian Hawaii) as many as eight ranked castes in between. For members of higher ranked lineages or castes, the tribute collected by the chief funds a better lifestyle in terms of food, housing, and special clothing and adornments.

Hence past chiefdoms can be recognized archaeologically by (sometimes) monumental construction, and by signs such as unequal distribution of grave goods in cemeteries: some bodies (those of chiefs and their relatives and bureaucrats) were buried in large tombs filled with luxury goods such as turquoise and sacrificed horses, contrasting with small unadorned graves of commoners. Based on such evidence, archaeologists infer that chiefdoms began to arise locally by around 5500 BC. In modern times, just before the recent nearly universal imposition of state government control around the world, chiefdoms were still widespread in Polynesia, much of sub-Saharan Africa, and the more productive areas of eastern and southwestern North America, Central America, and South America outside the areas controlled by the Mexican and Andean states. Chiefdoms that will be discussed in this book include the Mailu Islanders and Trobriand Islanders of the New Guinea region, and the Calusa and Chumash Indians of North America. From chiefdoms, states emerged (from about 3400 BC onwards) by conquest or amalgamation under pressure, resulting in

larger populations, often ethnically diverse populations, specialized spheres and layers of bureaucrats, standing armies, much greater economic specialization, urbanization, and other changes, to produce the types of societies that blanket the modern world.

Thus, if social scientists equipped with a time machine could have surveyed the world at any time before about 9000 BC, they would have found everybody everywhere subsisting as hunter/gatherers, living in bands and possibly already in some tribes, without metal tools, writing, centralized government, or economic specialization. If those social scientists could have returned in the 1400's, at the time when the expansion of Europeans to other continents was just beginning, they now would have found Australia to be the sole continent still occupied entirely by hunter/gatherers, still living mostly in bands and possibly in some tribes. But, by then, states occupied most of Eurasia, northern Africa, the largest islands of western Indonesia, most of the Andes, and parts of Mexico and West Africa. There were still many bands, tribes, and chiefdoms surviving in South America outside the Andes, in all of North America, New Guinea, the Arctic, and Pacific islands. Today, the whole world except Antarctica is divided at least nominally into states, although state government remains ineffective in some parts of the world. The world regions that preserved the largest numbers of societies beyond effective state control into the 20th century were New Guinea and the Amazon.

The continuum of increase in population size, political organization, and intensity of food production that stretches from bands to states is paralleled by other trends, such as increases in dependence on metal tools, sophistication of technology, economic specialization and inequality of individuals, and writing, plus changes in warfare and religion that I'll discuss in Chapters 3 and 4 and in Chapter 9 respectively. (Remember again: the developments from bands to states were neither

ubiquitous, nor irreversible, nor linear). Those trends, especially the large populations and political centralization and improved technology and weapons of states with respect to simpler societies, are what has enabled states to conquer those traditional types of societies and to subjugate, enslave, incorporate, drive out, or exterminate their inhabitants on lands coveted by states. That has left bands and tribes in modern times confined to areas unattractive or poorly accessible to state settlers (such as the Kalahari Desert inhabited by the !Kung, the African equatorial forests of the pygmies, the remote areas of the Amazon Basin left to Native Americans, and New Guinea left to New Guineans).

Why, as of the year of Columbus's first trans-Atlantic voyage of 1492, did people live in different types of societies in different parts of the world? At that time, some peoples (especially Eurasians) were already living under state governments with writing, metal tools, intensive agriculture, and standing armies. Many other peoples then lacked those hallmarks of civilization, and Aboriginal Australian and !Kung and African pygmies then still preserved many ways of life that had characterized all of the world until 9000 BC. How can we account for such striking geographic differences?

A formerly prevalent belief, still held by many individuals today, is that those regionally different outcomes reflect innate differences in human intelligence, biological modernity, and work ethic. Supposedly, according to that belief, Europeans are more intelligent, biologically advanced, and hard-working, while Aboriginal Australians and New Guineans and other modern band and tribal peoples are less intelligent, more primitive, and less ambitious. However, there is no evidence of those postulated biological differences, except for the circular reasoning that modern band and tribal peoples did continue to use more primitive technologies,

political organizations, and subsistence modes and were therefore assumed to be biologically more primitive.

Instead, the explanation for the differences in types of societies coexisting in the modern world depends on environmental differences. Increases in political centralization and social stratification were driven by increases in human population densities, driven in turn by the rise and intensification of food production (agriculture and herding). But surprisingly few wild plant and animal species are suitable for domestication to become crops and livestock. Those few wild species were concentrated in only about a dozen small areas of the world, whose human societies consequently enjoyed a decisive head start in developing food production, food surpluses, expanding populations, advanced technology, and state government. As I discussed in detail in my earlier book *Guns, Germs, and Steel*, those differences explain why Europeans, living near the world region (the Fertile Crescent) with the most valuable domesticable wild plant and animal species, ended up expanding over the world, while the !Kung and Aboriginal Australians did not. For the purposes of this book, that means that peoples still living or recently living in traditional societies are biologically modern peoples who merely happened to inhabit areas with few domesticable wild plant and animal species, and whose lifestyles are otherwise relevant to this book's readers.

Approaches, causes, and sources

In the preceding section we have been discussing differences among traditional societies that we can relate systematically to differences in population size and population density, means of obtaining food, and the environment. While the general trends that we have discussed do exist, it would be folly to imagine that everything about a society can be predicted from material conditions. Just think, for example, about the cultural and political differences between French and German people, not obviously related to the differences between France's and Germany's environments, which are in any case modest by the standards of worldwide environmental variation.

Scholars take various approaches towards understanding differences among societies. Each approach is useful for understanding some differences among some societies, but not appropriate for understanding other phenomena. One approach is the evolutionary one discussed and illustrated in the preceding section: to recognize broad features differing between societies of different population sizes and population densities, but shared among societies of similar population sizes and densities; and to infer, and sometimes to observe directly, changes in a society as it becomes larger or smaller. Related to that evolutionary approach is what may be termed an adaptationist approach: the idea that some features of a society are adaptive, and that they enable the society to function more effectively under its particular material conditions, physical and social environment, and size and density. Examples include the need for all societies consisting of more than a few thousand people to have leaders, and the potential of those large societies to generate the food surpluses required to support leaders. This approach leads one to formulate generalizations, and to interpret changes of a society with time in terms of the conditions and environment under which the society lives.

A second approach, lying at the opposite pole from that first approach, views each society as unique because of its particular history, and considers cultural beliefs and practices as largely independent variables not dictated by environmental conditions. Among the virtually infinite number of examples, let me mention one extreme case from one of the peoples to be discussed in this book, because it is so dramatic and so convincingly unrelated to material conditions. The Kaulong people, one of dozens of small populations living along the southern watershed of the island of New Britain just east of New Guinea, formerly practised the ritualized strangling of widows. When a man died, his widow called upon her brothers to strangle her. She was not murderously strangled against her will, nor was she pressured into this ritualized form of suicide by other members of her society. Instead, she had grown up observing it as the custom, followed the custom when she became widowed herself, strongly urged her brothers (or else her son if she had no brothers) to fulfill their solemn obligation to strangle her despite their natural reluctance, and sat cooperatively as they did strangle her.

No scholar has claimed that Kaulong widow strangling is in any way beneficial to Kaulong society or to the long-term (posthumous) genetic interests of the strangled widow or her relatives. No environmental scientist has recognized any feature of the Kaulong environment tending to make widow strangling more beneficial or understandable there than on New Britain's northern watershed, or further east or west along New Britain's southern watershed. I don't know of other societies practising ritualized widow strangling on New Britain or New Guinea, except for the related Sengseng people neighboring the Kaulong. Instead, it seems necessary to view Kaulong widow strangling as an independent historical cultural trait that arose for some unknown reason in that particular area of New Britain, and that

might have eventually been eliminated by natural selection among societies (i.e., through other New Britain societies not practising widow strangling thereby gaining advantages over the Kaulong), but that had persisted for some considerable time until outside pressure and contact caused it to be abandoned after about 1957. Anyone familiar with any other society will be able to think of less extreme traits that characterize that society, that may lack obvious benefits or may even appear harmful to that society, and that aren't clearly an outcome of local conditions.

Yet another approach towards understanding differences among societies is to recognize cultural beliefs and practices that have a wide regional distribution, and that spread historically over that region without being clearly related to the local conditions. Familiar examples are the near-ubiquity of monotheistic religions and non-tonal languages in Europe, contrasting with the frequency of non-monotheistic religions and tonal languages in China and adjacent parts of Southeast Asia. We know a lot about the origins and historical spreads of each type of religion and language in each region. However, I am not aware of convincing reasons why tonal languages would work less well in European environments, nor why monotheistic religions would be intrinsically unsuitable in Chinese and Southeast Asian environments. Religions, languages, and other beliefs and practices may spread in either of two ways. One way is by people expanding and taking their culture with them, as illustrated by European emigrants to the Americas and Australia establishing European languages and European-like societies there. The other way is as the result of people adopting beliefs and practices of other cultures: for example, modern Japanese people adopting Western clothing styles, and modern Americans adopting the habit of eating sushi, without Western emigrants having overrun Japan or Japanese emigrants having overrun the U.S.

A different issue about explanations that will recur frequently throughout this book is the distinction between the search for proximate explanations and the search for ultimate explanations. To understand this distinction, consider a couple consulting a psychotherapist after 20 years of marriage, and now intending to get divorced. To the therapist's question, "What suddenly brings you to see me and seek divorce after 20 years of marriage?", the husband replies: "It's because she hit me hard in the face with a heavy glass bottle: I can't live with a woman that did that." The wife acknowledges that she did indeed hit him with a glass bottle, and that that's the "cause" [i.e., the proximate cause] of their break-up. But the therapist knows that bottle attacks are rare in happy marriages and invite an inquiry about their own cause. The wife responds, "I couldn't stand anymore all his affairs with other women, that's why I hit him, his affairs are the real [i.e., the ultimate] cause of our break-up." The husband acknowledges his affairs, but again the therapist wonders why this husband, unlike most husbands in happy marriages, has been having affairs. The husband responds, "My wife is a cold selfish person, I found that I wanted a loving relationship like any normal person, that's what I've been seeking in my affairs, and that's the fundamental cause of our break-up."

In long-term therapy the therapist would explore further the wife's childhood upbringing that caused the wife to become cold and selfish (if that really is true). However, even this brief version of the story suffices to show that most causes and effects really consist of chains of causes, some more proximate and others more ultimate. In this book we shall encounter many such chains. For example, the proximate cause of a tribal war (Chapter 4) may be that person A in one tribe stole a pig from person B in another tribe; A justifies that theft in terms of a deeper cause (B's cousin had contracted to buy a pig from A's father but hadn't paid the agreed-on

price for the pig); and the ultimate cause of the war is drought and resource scarcity and population pressure, resulting in not enough pigs to feed the people of either tribe.

Those, then, are broad approaches that scholars take towards trying to make sense of differences among human societies. As for how scholars have acquired our knowledge about traditional societies, our sources of information can be divided somewhat arbitrarily into four categories, each with its own advantages and disadvantages, and blurring into each other. The most obvious method, and the source of most of the information in this book, is to send trained social or biological scientists to visit or live among a traditional people, and to carry out a study focusing on some specific topic. A major limitation in this approach is that scientists are usually not able to settle among a traditional people until the people have already been “pacified,” reduced by introduced diseases, conquered and subjected to control by a state government, and thus considerably modified from the people’s previous condition.

A second method is to attempt to peel back those recent changes in modern traditional societies, by interviewing living non-literate people about their orally transmitted histories, and by reconstructing in that way their society as it was several generations in the past. A third method shares the goals of oral reconstruction, insofar as it seeks to view traditional societies before they were visited by modern scientists. The approach, however, is to utilize the accounts of explorers, traders, government patrol officers, and missionary linguists who usually precede scientists in contacting traditional peoples. While the resulting accounts tend to be less systematic, less quantitative, and less scientifically rigorous than accounts by scientifically trained field workers, they offer the compensating advantage of describing a tribal society less modified than when studied later by visiting scientists. Finally, the sole source of

information about societies in the remote past, without writing, and not in contact with literate observers is archaeological excavations. These offer the advantage of reconstructing a culture long before it was contacted and changed by the modern world – at the cost of losing fine detail (such as people’s names and motives), and facing more uncertainty and effort in extracting social conclusions from the physical manifestations preserved in archaeological deposits.

For readers (especially for scholars) interested in learning more about these various sources of information on traditional societies, I provide an extended discussion on pp. X – Y of the Further Readings section at the back of this book.

A small book about a big subject

This book’s subject is, potentially, all aspects of human culture, of all peoples around the world, for the last 11,000 years. However, that scope would require a volume 2,397 pages long that no one would read. Instead, for practical reasons I have selected among topics and societies for coverage, in order to produce a book of readable length. I hope thereby to stimulate my readers to learn about topics and societies that I do not cover, by consulting the many other excellent books available (many of them cited in my Further Readings section).

As for the choice of topics, I picked nine fields for discussion in 11 chapters, in order to illustrate a spectrum of the different ways that we can use our understanding of traditional societies. Two topics – dangers and child-rearing – involve areas in which we as individuals can consider incorporating some practices of traditional societies into our own personal lives. These are the two areas in which the practices of some traditional societies among which I have lived have most strongly

influenced my own lifestyle and decisions. Three topics – treatment of the elderly, languages and multilingualism, and health-promoting lifestyles – involve areas in which some traditional practices may offer us models for our individual decisions, but may also offer models for policies that our society as a whole could adopt. One topic – peaceful dispute resolution – may be more useful for suggesting policies for our society as a whole than for guiding our individual lives. With respect to all of these topics, we must be clear that it is not a simple matter to borrow or adapt practices from one society into another society. For instance, even if you admire certain child-rearing practices of some traditional society, it may prove difficult for you to adopt that practice in rearing your own children, if all other parents around you are rearing their children in the ways of most modern parents.

As regards the topic of religion, I don't expect any individual reader or society to espouse some particular tribal religion as a result of my discussion of religions in Chapter 9. However, most of us in the course of our lives go through a phase or phases in which we are groping for resolution of our own questions about religion. In such a phase of life, readers may find it useful to reflect on the wide range of meaning that religion has held for different societies throughout human history. Finally, the pair of chapters on warfare illustrates an area in which, I believe, understanding of traditional practices may help us appreciate some benefits that state government has brought us, compared to traditional societies. (Don't react instantly in outrage by thinking of Hiroshima or trench warfare and closing your mind to a discussion of the "benefits" of state warfare; the subject is more complicated than it may at first seem).

Of course, this selection of topics omits many of the most central subjects of human social studies – such as art, cognition, cooperative behavior, cuisine, dance, gender relations, kinship systems, language's debated influence on perceptions and

thought (the Sapir-Whorf hypothesis), literature, marriage, music, sexual practices, and others. In defense, I reiterate that this book does not aim to be a comprehensive account of human societies, that it instead selects a few topics for the reasons given above, and that excellent books discuss these other topics from the perspective of other frameworks.

As for my choice of societies, it isn't feasible in a short book to draw examples from all small-scale traditional human societies around the world. I decided to concentrate on bands and tribes of small-scale farmers and hunter/gatherers, with less on chiefdoms and still less on emerging states – because the former societies are more different from, and can teach us more by contrast with, our own modern societies. I repeatedly cite examples from a few dozen such traditional societies around the world. In that way, I hope that readers will build up a more complete and nuanced picture of these few dozen societies, and will see how different aspects of societies fit together: e.g., how child-rearing, old age, dangers, and dispute resolution play out in the same society.

Some readers may feel that disproportionate numbers of my examples are drawn from the island of New Guinea and adjacent Pacific islands. Partly, that's because it's the area that I know best, and where I have spent the most time. But it's also because New Guinea really does contribute a disproportionate fraction of human cultural diversity. It's the exclusive home of 1,000 of the world's approximately 7,000 languages. It holds the largest number of societies that in modern times still lay beyond the control of state government or were only recently influenced by state government. Its populations span a great diversity of traditional lifestyles, ranging from nomadic hunter/gatherers, coastal and island-based seafarers, and lowland sago specialists to settled Highland gardeners and swineherds, composing groups ranging

from a few dozen to 200,000 people. Nevertheless, you'll see that I discuss extensively the observations of other scholars about societies from all of the inhabited continents.

So as not to deter potential readers from reading this book at all by its length and price, I have omitted footnotes and references for individual statements inserted into the text. Instead, I gather references in a Further Readings section organized by chapters. The portions of that section providing references applicable to the whole book, and references for this Prologue, are printed at the end of the text. The portions providing references for Chapters 1 – 11 and the Epilogue are not printed but are instead posted on a freely accessible website (www.xxx----). Although the Further Readings section is much longer than most readers will want, it still does not pretend to be a complete bibliography for each chapter. Instead, I select recent works that will offer readers with specialized interests bibliographies of that chapter's material, plus some classic studies that readers will enjoy.

Plan of the book

This book contains 11 chapters grouped into five parts, plus an Epilogue. Part 1, consisting of the single Chapter 1, sets the stage on which the topics of the remaining chapters play out, by explaining how traditional societies divide space -- whether by clear boundaries separating mutually exclusive territories like those of modern states, or by more fluid arrangements in which neighboring groups enjoy reciprocal rights to use each others' homelands for specified purposes. But there is never complete freedom for anyone to travel anywhere, so traditional peoples tend to

view other people as split into three types: known individuals who are friends, other known individuals who are enemies, and unknown strangers who must be considered as likely enemies. As a result, traditional people could not know of the outside world distant from their homeland.

Part 2 then comprises three chapters on dispute resolution. In the absence of centralized state governments and their judiciaries, traditional small-scale societies resolve disputes in either of two ways, one of which is more conciliatory, the other more violent, than dispute resolution in state societies. I illustrate peaceful dispute resolution (Chapter 2) by an incident in which a New Guinea child was killed accidentally, and the child's parents and the killer's associates reached agreement on compensation and emotional reconciliation within a few days. The goal of such traditional compensation processes is not to determine right or wrong, but instead to restore a relationship or non-relationship between members of a small society who will encounter each other repeatedly for the rest of their lives. I contrast this peaceful form of traditional dispute resolution with the operation of the law in state societies, where the process is slow and adversarial, the parties are often strangers who will never encounter each other again, the focus is on determining right or wrong rather than on restoring a relationship, and the state has its own separate interests which may not coincide with those of the victim. For a state, a governmental justice system is a necessity. However, there may be some features of traditional peaceful dispute resolution that we could usefully incorporate into state justice systems.

If a dispute in a small-scale society is not resolved peacefully between the participants, the alternative is violence or war, because there is no state justice to intervene. In the absence of strong political leadership and of the state's assertion of a monopoly on the use of force, violence tends to lead to cycles of revenge killings. My

brief Chapter 3 illustrates traditional warfare by describing an apparently tiny war among the Dani people of the western New Guinea Highlands. My lengthier Chapter 4 then reviews traditional warfare around the world, in order to understand whether it really deserves to be defined as war, why its proportionate death toll is often so high, how it differs from state warfare, and why wars are more prevalent among some peoples than among others.

This book's third part consists of two chapters about opposite ends of the human life cycle: childhood (Chapter 5) and old age (Chapter 6). The range of traditional child-rearing practices is broad, from societies with more repressive practices to societies with more laissez-faire practices than are tolerated in most state societies. Nevertheless, some frequent themes emerge from a survey of traditional child-rearing. Readers of this chapter are likely to find themselves admiring some but being horrified at other traditional child-rearing practices, and asking whether some of the admirable practices could be incorporated into our own child-rearing repertoire.

As for treatment of the elderly (Chapter 6), some traditional societies, especially nomadic ones or those in harsh environments, are forced to neglect, abandon, or kill their elderly. Others afford their elderly far more satisfying and productive lives than do most Westernized societies. Factors behind this variation include environmental conditions, the utility and power of the elderly, and society's values and rules. The greatly increased lifespans and apparently decreased utilities of the elderly in modern societies have created for us a tragedy, towards whose amelioration those traditional societies providing their elderly with satisfying useful lives may offer examples.

Part 4 consists of two chapters on dangers and our responses to them. I begin (Chapter 7) by describing three actually or apparently dangerous experiences that I

survived in New Guinea, and what I learned from them about a widespread attitude of traditional peoples that I admire and term “constructive paranoia.” By that paradoxical expression, I mean routinely reflecting on the significance of small events or signs that on each occasion carry low risks but that are likely to recur thousands of times in one’s lifetime, and hence are ultimately likely to prove crippling or fatal if ignored. “Accidents” don’t just happen at random or through bad luck: everything is traditionally viewed as happening for a reason, so one must remain alert to the possible reasons and be cautious. The following Chapter 8 describes the types of dangers inherent in traditional life, and the diverse ways in which people respond to them. It turns out that our perceptions of dangers, and our reactions to them, are systematically irrational in several ways.

The concluding Part 5 comprises three chapters on three topics central to human life and changing rapidly in modern times: religion, language diversity, and health. Chapter 9, about the uniquely human phenomenon of religion, follows straight on from Chapters 7 and 8 about dangers, because our traditional constant search for causes of danger may have contributed to religion’s origins. Religion’s near-ubiquity among human societies suggests that it fulfills important functions, regardless of whether its claims are true. But religion has fulfilled different functions whose relative importance has changed as human societies have evolved. It is interesting to speculate about which functions of religion are likely to be strongest over the coming decades.

Language (Chapter 10), like religion, is unique to humans: in fact, it’s often considered the most important attribute distinguishing humans from (other) animals. While the median number of speakers of a language is only a few hundred to a few thousand individuals for most small-scale hunter/gatherer societies, members of many

such societies are routinely multilingual. Modern Americans often assume that multilingualism should be discouraged, because it is supposed to hinder child language acquisition and immigrant assimilation. However, recent work suggests that multilingual people gain important life-long cognitive benefits. Nevertheless, languages are now disappearing so rapidly that 95% of the world's languages will be extinct or moribund within a century if current trends continue. The consequences of this undoubted fact are as controversial as are the consequences of multilingualism: many people would welcome a world reduced to just a few widespread languages, while other people point to advantages that language diversity brings to societies as well as to individuals.

The last chapter (Chapter 11) is also the one of most direct practical relevance to us today. Most of us citizens of modern states will die of non-communicable diseases – diabetes, hypertension, stroke, heart attacks, various cancers, and others – that are rare or unknown among traditional peoples, who nevertheless often proceed to acquire these diseases within a decade or two of adopting a Westernized lifestyle. Evidently, something about the Westernized lifestyle brings on these diseases, and we could minimize our risk of dying of these commonest causes of our deaths if we could minimize those lifestyle risk factors. I illustrate these grim realities by the two examples of hypertension and Type-2 diabetes. Both of these diseases involve genes that must have been advantageous to us under conditions of traditional lifestyles, but that have become lethal under conditions of the Westernized lifestyle. Many modern individuals have reflected on these facts, modified their lifestyles accordingly, and thereby extended their lifespans and improved their quality of life. Thus, if these diseases kill us, it is with our own permission.

Finally, the Epilogue comes full cycle from the Port Moresby airport scene with which my Prologue began. It's not until my arrival at Los Angeles airport that I begin my emotional re-immersion in the American society that is my home, after months in New Guinea. Despite the drastic differences between Los Angeles and New Guinea's jungles, much of the world until yesterday lives on in our bodies and in our societies. The recent big changes began only 11,000 years ago even in the world region where they first appeared, began just a few decades ago in the most populous areas of New Guinea, and have barely begun in the few remaining still-uncontacted areas of New Guinea and the Amazon. But for those of us who have grown up in modern state societies, modern conditions of life are so pervasive, and so taken for granted, that it's hard for us to notice the fundamental differences of traditional societies during short visits to them. Hence the Epilogue begins by recounting some of those differences as they strike me upon arriving at Los Angeles airport, and as they strike American children, or New Guinea and African villagers, who grew up in traditional societies and then moved to the West as teen-agers or adults.

Traditional societies represent thousands of millennium-long natural experiments in organizing human lives. We can't repeat those experiments by redesigning thousands of societies today in order to wait decades and observe the outcomes; we have to learn from the societies that already ran the experiments. When we learn about features of traditional life, some of them are ones that we feel relieved to be rid of, and that make us appreciate our own societies better. Other features are ones that we are likely to envy, to view their loss wistfully, or to ask whether we could selectively adopt or adapt them for ourselves. For instance, we certainly envy the traditional lack of the non-communicable diseases associated with the Westernized lifestyle. When we learn about traditional dispute resolution, child-

rearing, treatment of the elderly, alertness to dangers, and routine multilingualism, we may also decide that some of those traditional features would be desirable and feasible for us to incorporate.

At minimum, I hope that you will come to share my fascination with the different ways in which other peoples have organized their lives. Beyond that fascination, you may decide that some of what works so well for them could also work well for you as an individual, and for us as a society.