

Key Terms

assimilation, 228	majority groups, 210	phenotype, 212
clines, 211	minority groups, 210	plural society, 229
cultural colonialism, 234	multiculturalism, 229	prejudice, 233
descent, 220	nation, 227	race, 218
discrimination, 233	nation-state, 227	racial classification, 211
ethnic group, 208	nationalities, 228	racism, 218
ethnicity, 209	natural selection, 215	refugees, 234
ethnocide, 234		stereotypes, 233
genocide, 234		
hypodescent, 220		

Chapter

11

Applying Anthropology

The Role of the Applied Anthropologist

*Early Applications**Academic and Applied Anthropology**Applied Anthropology Today*

Development Anthropology

Equity

Strategies for Innovation

*Overinnovation**Underdifferentiation**Indigenous Models*

Anthropology and Education

Urban Anthropology

Urban versus Rural

Medical Anthropology

Anthropology and Business

Careers and Anthropology

*Anthropology Today:**Culturally Appropriate Marketing*

As we learned in Chapter 1, applied anthropology is the use of anthropological data, perspectives, theory, and methods to identify, assess, and solve contemporary problems (see Ervin 2005; Wasson, Butler, and Copeland-Carson 2012; Nolan 2013). Applied anthropologists help make anthropology relevant and useful to the world beyond anthropology. Medical anthropologists, for instance, have worked as cultural interpreters in public health programs, helping such programs fit into local culture. Development anthropologists work for or with international development agencies, such as the World Bank and the U.S. Agency for International Development (USAID). The findings of garbology, the archaeological study of waste, are relevant to the Environmental Protection Agency, the paper industry, and packaging and trade associations. Archaeology also is applied in cultural resource management and historic preservation. Biological anthropologists apply their expertise in programs aimed at public health, nutrition, genetic counseling, aging, substance abuse, and mental health. Forensic anthropologists work with the police, medical examiners, the courts, and international organizations to identify victims of crimes, accidents, wars, and terrorism. Linguistic anthropologists study physician–patient communication and show how speech differences influence classroom learning. Most applied anthropologists seek humane and effective ways of helping local people.

The ethnographic method is a particularly valuable tool in applying anthropology. Remember that ethnographers study societies firsthand, living with, observing, and

learning from ordinary people. Nonanthropologists working in social-change programs often are content to converse with officials, read reports, and copy statistics. However, the applied anthropologist's likely early request is some variant of "take me to the local people." Anthropologists know that people must play an active role in the changes that affect them and that "the people" have information that "the experts" lack.

Anthropological *theory*, the body of findings and generalizations of the four subfields, also guides applied anthropology. Just as theory aids practice, application fuels theory (see Rytko-Bauer, Singer, and Van Willigen 2006). As we compare social-change programs, our understanding of cause and effect increases. We add new generalizations about culture change to those discovered in traditional and ancient cultures.

The Role of the Applied Anthropologist

Early Applications

Application was a central concern of early anthropology in Great Britain (in the context of colonialism) and the United States (in the context of Native American policy). Before turning to the new, we should consider some problems with the old. For the British empire, specifically its African colonies, Bronislaw Malinowski (1929) proposed that "practical anthropology" (his term for colonial applied anthropology) should focus on Westernization, the diffusion of European culture into tribal societies. Malinowski did not question the legitimacy of colonialism or the anthropologist's role in making it work. He saw nothing wrong with aiding colonial regimes by studying land tenure and land use, to recommend how much of their land local people should be allowed to keep and how much Europeans should be permitted to take. Malinowski's views exemplify a historical association between early anthropology, particularly in Europe (especially England, France, and Portugal), and colonialism (see also Duffield and Hewitt, eds. 2009; Lange 2009; Rytko-Bauer, Singer, and Van Willigen 2006).

During World War II, American anthropologists studied Japanese and German "culture at a distance" in an attempt to predict the behavior of the enemies of the United States. After that war, applied anthropologists worked on Pacific islands to promote local-level cooperation with American policies in various trust territories. The American Anthropological Association (AAA) has raised strong ethical objections to applying anthropology in war zones and for military intelligence. Such concerns were voiced during the Vietnam War. More recently they have emerged in criticisms of anthropologists' participation in the Human Terrain System (HTS) project in Iraq and Afghanistan, as discussed in Chapter 3. Anthropological research should not harm the people anthropologists study.

Academic and Applied Anthropology

After World War II, the baby boom, which began in 1946 and peaked in 1957, fueled a tremendous expansion of the American educational system. New junior, community, and four-year colleges opened, and anthropology became a standard part of the college

curriculum. During the 1950s and 1960s, most American anthropologists were college professors, although some still worked in agencies and museums.

The growth of academic anthropology continued through the early 1970s. Especially during the Vietnam War, undergraduates flocked to anthropology classes to learn about other cultures. Students were especially interested in Southeast Asia, whose indigenous societies were being disrupted by war. Many anthropologists protested the superpowers' apparent disregard for non-Western lives, values, customs, and social systems.

Most anthropologists still worked in colleges and museums during the 1970s and 1980s. However, an increasing number of anthropologists were employed by international organizations, governments, businesses, hospitals, and schools. The AAA estimates that nowadays more than half of anthropology PhDs seek nonacademic employment. This shift toward application has benefited the profession. It has forced anthropologists to consider the wider social value and implications of their research.

Applied Anthropology Today

Most contemporary applied anthropologists see their work as radically removed from the colonial enterprise. Modern applied anthropology usually is seen as a helping profession, devoted to assisting local people, as anthropologists speak up for the disenfranchised. However, applied anthropologists also have clients that are neither poor nor powerless. An applied anthropologist working as a market researcher for a business is concerned with discovering how to expand profits for his or her employer or client. Such goals can pose ethical dilemmas, as can work in cultural resource management (CRM). The CRM anthropologist helps decide how to preserve significant remains when sites are threatened by development or public works. A CRM firm typically is hired by someone seeking to build a road or a factory. That client may have a strong interest in an outcome in which no sites are found that need protecting. Even if they don't work for colonial powers or the military, applied anthropologists still face ethical questions: To whom does the researcher owe loyalty? How does one criticize programs in which one has participated (see Escobar 1991, 1994)? Anthropology's professional organizations have addressed such questions by establishing codes of ethics and ethics committees. As Karen Tice (1997) notes, attention to ethical issues has become paramount in the teaching of applied anthropology.

Anthropologists are experts on human problems and social change, who study, understand, and respect diverse cultural values. Given this background, anthropologists are highly qualified to suggest, plan, and implement social policy affecting people. Proper roles for applied anthropologists include (1) identifying needs for change that local people perceive, (2) working with those people to design culturally appropriate and socially sensitive change, and (3) protecting local people from harmful policies and projects that may threaten them.

Development Anthropology

Development anthropology is the branch of applied anthropology that focuses on social issues in, and the cultural dimension of, economic development. Development anthropologists don't just carry out development policies planned by others; they also plan

and guide policy. (For more detailed discussions of issues in development anthropology, see Edelman and Haugerud 2005; Escobar 2012; Ferguson 1995; Nolan 2002.)

Still, ethical dilemmas often confront development anthropologists (Escobar 1991, 2012). Foreign aid, including funds for economic development, usually doesn't go where need and suffering are greatest. Rather, such funds are spent on political, economic, and strategic priorities as international donors, political leaders, and powerful interest groups perceive them. Planners' interests don't always coincide with the best interests of the local people. Although the stated aim of most development projects is to enhance the quality of life, living standards often decline in the affected area.

Equity

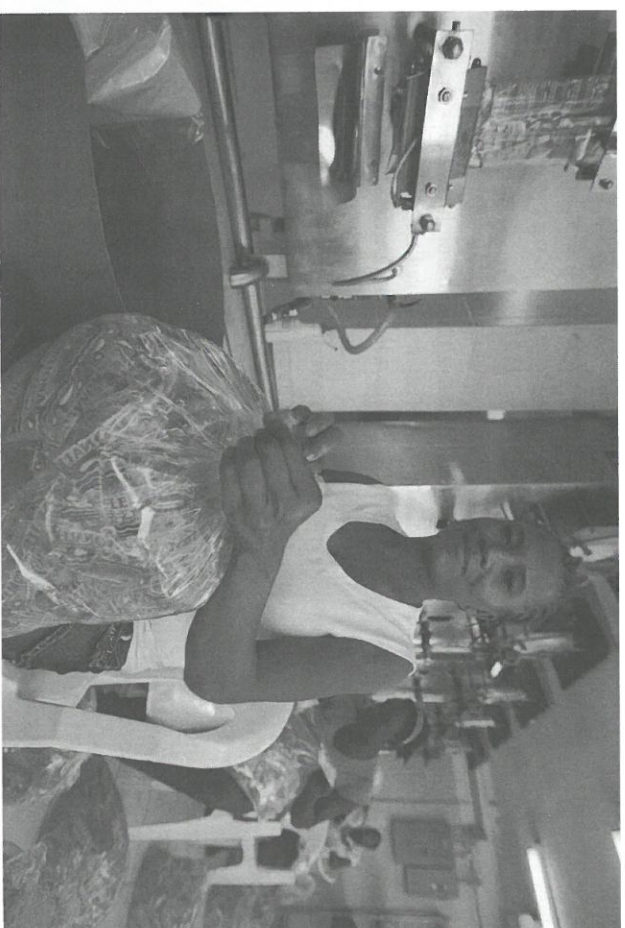
A commonly stated goal of recent development policy is to promote equity. **Increased equity** means reduced poverty and a more even distribution of wealth. However, if projects are to increase equity, they must have the support of reform-minded governments. Wealthy and powerful people typically resist projects that threaten their vested interests.

Some development projects actually widen wealth disparities; that is, they have a negative equity impact. An initial uneven distribution of resources often becomes the basis for even greater inequality after the project. In Bahia, Brazil (Kottak 2006), for example, sailboat owners (but not nonowners) got loans to buy motors for their boats. To repay the loans, the owners increased the percentage of the catch they took from the men who fished in their boats. Over the years, they used their rising profits to buy larger and more expensive boats. The result was stratification—the creation of a group of wealthy people within a formerly more egalitarian community. New boats became so expensive that ambitious young men, who once would have sought careers in fishing, no longer could afford to buy a boat of their own. They sought wage labor on land instead. To avoid such results, credit-granting agencies must seek out and invest in enterprising young fishers, rather than giving loans only to owners and established businesspeople.

Strategies for Innovation

Development anthropologists should work closely with local people to assess, and help them realize, their own wishes and needs for change. Funding development projects in area A that are inappropriate there but needed in area B, or that are unnecessary anywhere, is a waste of money when so many true local needs cry out for a solution. Development anthropology can help sort out the needs of the As and Bs and fit projects accordingly. Projects that put people first by consulting with them and responding to their expressed needs must be identified (Cerne, ed. 1991). Thereafter, development anthropologists can work to ensure socially compatible ways of implementing a good project.

In a comparative study of 68 rural development projects from around the world, I found the culturally compatible economic development projects to be twice as successful financially as the incompatible ones (Kottak 1990b, 1991). This finding suggests that using anthropological expertise in planning, to ensure cultural compatibility, is cost effective. To maximize social and economic benefits, projects must (1) be culturally compatible, (2) respond to locally perceived needs, (3) involve men and women in planning



Shown here, a worker at Eau Nationale, a Haitian bottled water plant. Production at this plant, which produces clean water meeting international standards, slowed down after a massive earthquake hit Haiti in 2010. In an unforeseen and unfortunate consequence of international aid, the bottled water imported by NGOs reduced demand for the local product, threatening the survival of Eau Nationale. What's an NGO?

and carrying out the changes that affect them, (4) harness traditional organizations, and (5) be flexible.

Consider a recent example of a development initiative that failed because it ignored local culture. Working in Afghanistan after the fall of the Taliban, ethnographer Noah Coburn (2011) studied Istailif, a village of potters. During his fieldwork there Coburn discovered that an NGO had spent \$20,000 on an electric kiln that could have greatly enhanced the productivity of local potters. The only problem was that the kiln was donated to a women's center that men could not enter. The misguided donors ignored the fact that Istailif's men did the work—pot-making and firing—that a kiln could facilitate. Women's role in pottery came later—in glazing and decorating.

Overinnovation

In my comparative study, the compatible and successful projects avoided the fallacy of **overinnovation** (too much change). People usually are willing to change just enough to maintain, or slightly improve on, what they already have. Motives for modifying behavior come from the traditional culture and the small concerns of ordinary life. Peasants' values are not such abstract ones as “learning a better way,” “progressing,” “increasing technical know-how,” “improving efficiency,” or “adopting modern techniques.”

Their objectives are down-to-earth and specific—e.g., to enhance the productivity of their crops, amass resources for a ceremony, get a child through school, or have enough

cash to pay the tax bill. The goals and values of subsistence producers differ from those of people who work for cash, just as they differ from those of development planners. Different value systems must be considered during planning.

Development projects that fail usually are either (or both) economically and culturally incompatible. For example, one South Asian project promoted the cultivation of onions and peppers, expecting this practice to fit into a preexisting labor-intensive system of rice-growing. Cultivation of these cash crops wasn't traditional in the area, and the labor peaks for pepper and onion production coincided with those for rice, to which the farmers gave priority.

Another naive and incompatible project was an overinnovative scheme in Ethiopia. Its major fallacy was to try to convert free-ranging nomadic herders into farm workers. Outsiders—commercial farmers—were to get much of the herders' territory, to convert to commercial farmland—plantations. The pastoralists were expected to settle down and start working on those plantations. The planners naively expected the herders to give up a generations-old way of life to work three times harder growing rice and picking cotton for bosses.

Underdifferentiation

The fallacy of **underdifferentiation** is planners' tendency to view "the less-developed countries" as more alike than they are. Often development agencies have ignored huge cultural contrasts (e.g., between Brazil and Burundi) and adopted a uniform approach to deal with very different sets of people. Planners also have tried to impose incompatible property concepts and social units.

Ethnocentrically, planners often assume that the individual and the nuclear family are key social units among the intended beneficiaries. This was true of one project in West Africa, where the extended family was the basic social unit. The project succeeded despite its faulty social design because the participants used their traditional extended family networks to attract additional settlers. Eventually, twice as many people as planned benefited as extended family members flocked to the project area. Here, settlers used the principles of their traditional society to modify the project design that had been imposed on them.

Another dubious social model that has been common in development planning is the cooperative. In the comparative study of rural development projects, new cooperatives fared badly. Cooperatives succeeded only when they harnessed preexisting local-level communal institutions. This is a corollary of a more general rule: *Participants' groups are most effective when they are based on traditional social organization or on a socioeconomic similarity among members.*

An alternative to such foreign models is needed: greater use of indigenous social models in economic development. These are traditional social units, such as the clans, lineages, and other extended kin groups of Africa, Oceania, and many other nations, with their communally held estates and resources. *The most humane and productive strategy for change is to base the social design for innovation on traditional social forms in each target area.*

Indigenous Models

Many governments are not genuinely, or realistically, committed to improving the lives of their citizens. Interference by major powers also has kept governments from enacting

needed reforms. Occasionally, however, a government does act as an agent of and for its people. One historic example is Madagascar, whose people, the Malagasy, were organized into descent groups prior to indigenous state formation in the 18th century. The Merina, creators of the major precolonial state of Madagascar, wove descent groups into its structure, making members of important groups advisers to rulers—thus giving them authority in government. The Merina state collected taxes and organized labor for public works projects. In return, it redistributed resources to peasants in need. It also granted them some protection against war and slave raids and allowed them to cultivate their rice fields in peace. The government maintained the water works for rice cultivation. It opened to ambitious peasant boys the chance of becoming state bureaucrats, through hard work and study.

Throughout the history of the Merina state—and continuing to some extent in postcolonial Madagascar—there have been strong relationships between the individual, the descent group, and the state. Local Malagasy communities, where residence is based on descent, are more cohesive and homogeneous than are communities in Latin America or North America. Madagascar gained political independence from France in 1960. Its new government had an economic development policy aimed at increasing the ability of the Malagasy to feed themselves. Government policy emphasized increased production of rice, a subsistence crop, rather than cash crops. Furthermore, local communities, with their traditional cooperative patterns and solidarity based on kinship and descent, were treated as partners in, not obstacles to, the development process.

In a sense, the descent group is preadapted to equitable national development. In Madagascar, descent groups pooled their resources to educate their most ambitious members. Once educated, those men and women gained economically secure positions in the nation. They then shared the advantages of their new positions with their kin. For example, they gave room and board to rural cousins attending school and helped them find jobs.

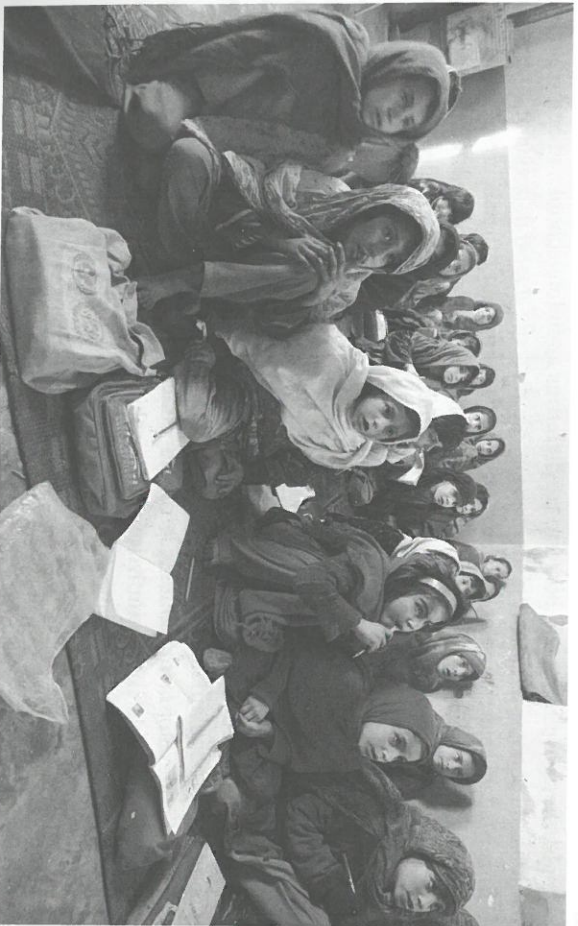
This Madagascar example suggests that when government officials are of "the people" (rather than the elites) and have strong personal ties to common folk, they are more likely to promote democratic reform. In Latin America, by contrast, leaders and followers too often have been from different social classes, with no connections based on kinship, descent, marriage, or common background. When elites rule, elites usually prosper. Recently, however, Latin America has elected some nonelite leaders. Brazil's lower class (indeed the entire nation) benefited socioeconomically when one of its own was elected president. Luis Inácio da Silva, or Lula, a former factory worker with only a fourth-grade education, served two terms (ending in 2011) as one of the Western Hemisphere's most popular leaders.

Realistic development policies promote change but not overinnovation. Many changes are possible if the aim is to preserve things while making them work better. Successful economic development projects respect, or at least don't attack, local cultural patterns. Effective development draws on indigenous cultural practices and social structures. As nations become more tied to the world capitalist economy, it is not inevitable that indigenous forms of social organization will break down into nuclear family organization, impersonality, and alienation. Descent groups, with their traditional communalism and solidarity, have important roles to play in economic development.

Anthropology and Education

Attention to culture also is fundamental to **anthropology and education**, a field whose research extends from classrooms into homes, neighborhoods, and communities (see Anderson-Levitt 2012; Levinson and Pollock, eds. 2011; Spindler and Hammond 2006). In classrooms, anthropologists have observed interactions among teachers, students, parents, and visitors. Jules Henry's classic account of the American elementary school classroom (1955) shows how students learn to conform to and compete with their peers. Anthropologists view children as total, cultural creatures whose enculturation and attitudes toward education belong to a context that includes family and peers (see also Kontopodis, Wulf, and Fichtner 2011).

Sociolinguists and cultural anthropologists have worked side by side in education research. In one classic study of Puerto Rican seventh-graders in the urban Midwest, anthropologists uncovered some key misconceptions held by teachers (Hill-Burnett 1978). The teachers mistakenly had assumed that Puerto Rican parents valued education less than did non-Hispanics, but in-depth interviews revealed that the Puerto Rican parents valued it more. The anthropologists also identified certain practices that were preventing Hispanics from being adequately educated. For example, the teachers' union and the board of education had agreed to teach "English as a foreign language." However, they had provided no bilingual teachers to work with Spanish-speaking students. The school was assigning all students (including non-Hispanics) with low reading scores and behavior problems to the English-as-a-foreign-language classroom. This educational disaster brought together in the classroom a teacher who spoke no Spanish, children



Afghan girls attend a lesson at the secondary school in Sarkani village, Kunar Province, eastern Afghanistan. What do you see here that differs from classrooms in your country?

who barely spoke English, and a group of English-speaking students with reading and behavior problems. The Spanish speakers were falling behind not just in reading but in all subjects. They could at least have kept up in the other subjects if a Spanish speaker had been teaching them science, social studies, and math until they were ready for English-language instruction in those areas.

Urban Anthropology

For centuries, cities have been influenced by global forces, including world capitalism and colonialism (Smart and Smart 2003). However, the roles of cities in the world system have changed recently because of the time-space compression made possible by modern transportation and communication systems. That is, everything appears closer today because contact and movement are so much easier.

In the context of globalization, the mass media have joined local factors in guiding people's routines, dreams, and aspirations. Although people live in particular places, their imaginations are not locally confined (Appadurai 1996). Media-transmitted images and information help draw people to cities. People migrate partly for economic reasons, but also to be where the action is. Rural Brazilians routinely cite *movimento*, urban activity and excitement, as something to be valued. International migrants tend to settle in large cities, where a lot is going on and where they can feel at home in ethnic enclaves. Consider Canada, which, after Australia, is the country with the highest percentage of foreign-born population. Three-quarters of immigrants to Canada settle in Toronto, Vancouver, or Montreal. By 2031, it is estimated that nearly one-half (46%) of Canadians aged 15 and over will be foreign born or will have at least one foreign-born parent, up from 39% in 2006 (Statistics Canada 2010).

Urban living has increased steadily since the Industrial Revolution. The percentage of the world's population living in cities surpassed 50 percent for the first time in 2008 and is projected to rise to 70 percent by 2050 (Handwerk 2008). Only about 3 percent of people were city dwellers in 1800, compared with 13 percent in 1900, over 40 percent in 1980, and over 50 percent today (see Handwerk 2008; Smart and Smart 2003). The more-developed countries (MDCs) were 76 percent urbanized in 2000, compared with 39 percent for the less-developed countries (LDCs). However, the urbanization growth rate is much faster in the LDCs (Smart and Smart 2003). In Africa and Asia alone, a million people a week migrate to cities (Handwerk 2008). The world had only 16 cities with more than a million people in 1900, versus 314 such cities in 2005 (Butler 2005; Stevens 1992).

One billion people now live in urban slums, mostly without reliable water, sanitation, and public services (Handwerk 2008; Vidal 2003). If current trends continue, urban population increase and the concentration of people in slums will be accompanied by rising rates of crime, along with water, air, and noise pollution. These problems will be most severe in the LDCs.

As industrialization and urbanization spread globally, anthropologists increasingly study these processes and the social problems they create. **Urban anthropology**, which has theoretical (basic research) and applied dimensions, is the cross-cultural and



One-sixth of the Earth's population lives in urban slums. Rocinha (shown here) is a populous shantytown city within the city of Rio de Janeiro, Brazil. How might anthropologists study slums?

ethnographic study of urbanization and life in cities (see Gmelch, Kemper, and Zenner 2010; Pardo and Prato 2012; Smart and Smart 2003; Stevenson 2003). The United States and Canada have become popular arenas for urban anthropological research on topics such as immigration, ethnicity, poverty, class, and urban violence (Vigil 2003, 2010).

Urban versus Rural

An early student of urbanization, the anthropologist Robert Redfield, contrasted rural communities, whose social relations are on a face-to-face basis, with cities, where impersonality reigns. Redfield (1941) proposed that urbanization be studied along a rural-urban continuum. He described differences in values and social relations in four sites that spanned such a continuum. In Mexico's Yucatán peninsula, Redfield compared an isolated Maya-speaking Indian community, a rural peasant village, a small provincial city, and a large capital. Several studies in Africa (Little 1971) and Asia were influenced by Redfield's view that cities are centers through which cultural innovations spread to rural and tribal areas.

In any nation, urban and rural represent different social systems. However, cultural diffusion or borrowing occurs as people, products, images, and messages move from one to the other. Migrants bring rural practices and beliefs to cities and take urban patterns back home. The experiences and social forms of the rural area affect adaptation to city life. City folk also develop new institutions to meet specific urban needs.

An applied anthropology approach to urban planning starts by identifying key social groups in specific urban contexts—avoiding the fallacy of underdifferentiation. After identifying those groups, the anthropologist might elicit their wishes for change, convey those needs to funding agencies, and work with agencies and local people to realize those goals. In Africa relevant groups might include ethnic associations, occupational groups, social clubs, religious groups, and burial societies. Through membership in such groups, urban Africans maintain wide networks of personal contacts and support. The groups provide cash support and lodging for their rural relatives. Sometimes such groups think of themselves as a gigantic kin group that includes urban and rural members. Members may call one another “brother” and “sister.” As in an extended family, richer members help their poorer relatives. A member's improper behavior, however, can lead to expulsion—an unhappy fate for a migrant in a large, ethnically heterogeneous city.

One role for the urban applied anthropologist is to help people deal with urban institutions, such as legal and social services, with which recent migrants may be unfamiliar. In certain North American cities, as in Africa, ethnic associations are relevant urban groups. One example comes from Los Angeles, which has the largest Samoan immigrant community in the United States (over 50,000 people). Samoans in Los Angeles draw on their traditional system of *matuai* (*matui* means “chief”; the *matui* system now refers to respect for elders) to deal with modern urban problems. One example: When a White police officer killed two unarmed Samoan brothers, and the judge dismissed charges against the officer, local leaders used the *matui* system to calm angry youths. (Young Samoans have formed gangs, like other ethnic groups in the Los Angeles area.) Clan leaders and elders organized a well-attended community meeting, in which they urged young members to be patient. The Samoans then used the American judicial system. They brought a civil case against the officer in question and pressed the U.S. Justice Department to initiate a civil rights case in the matter (Mydans 1992b). Not all conflicts involving gangs and law enforcement end so peacefully.

James Vigil (2003, 2010) examines gang violence in the context of large-scale immigrant adaptation to American cities. He notes that before the 1970s most gangs were located in White ethnic enclaves in eastern and midwestern cities. Back then, gang incidents typically were brawls involving fists, sticks, and knives. Today, gangs more often are composed of non-White ethnic groups, and handguns have replaced less lethal weapons. Gangs still consist mostly of male adolescents who have grown up together, usually in a low-income neighborhood, where it's estimated that about 10 percent of young men join gangs (Vigil 2003, 2010).

The populations that include most of today's gang members settled originally in poor urban areas. On the East Coast these usually were run-down neighborhoods where a criminal lifestyle already was present. Around Los Angeles, urban migrants created squatterlike settlements in previously empty spaces. Immigrants tend to reside in neighborhoods apart from middle-class people, thus limiting their opportunities for integration (Vigil 2003). In addition, many industries and jobs have moved from American cities to distant suburbs and foreign nations. Given their limited access to entry-level jobs, many urban minority youth pursue informal and illegal economic arrangements, of which drug trafficking in particular has heightened gang violence (Singer 2008; Vigil

2003, 2010). How might an applied anthropologist approach the problem of urban violence? Which groups would have to be involved in the study (see Vigel 2010)?

Medical Anthropology

Medical anthropology is both academic and applied and includes anthropologists from all four subfields (see Brown and Barrett 2010; Dressler, Oths, and Gravlee 2005; Joralemon 2010; Singer 2012; Trevathan, Smith, and McKenna, eds. 2008; Wiley and Allen 2012). **Medical anthropology** is a biocultural field that studies variation in health care systems, including disease, illness, health standards, and disease theories. Medical anthropologists examine such questions as which diseases and health conditions affect particular populations (and why) and how illness is socially constructed, diagnosed, managed, and treated in various societies.

Disease refers to a scientifically identified health threat caused genetically or by a bacterium, virus, fungus, parasite, or other pathogen. **Illness** is a condition of poor health perceived or felt by an individual (Inhorn and Brown 1990). Perceptions of good and bad health are culturally constructed. Various cultures and ethnic groups recognize different illnesses, symptoms, and causes and have developed different health care systems and treatment strategies (Womack 2010).

The incidence and severity of *disease* vary as well (see Baer, Singer, and Susser 2013). Group differences are evident in the United States. One study examined health status indicators for groups named in the U.S. census: non-Hispanic Whites, African Americans, Hispanics, American Indians, and Asians or Pacific Islanders (Keppel, Pearch, and Wagener 2002). African Americans' rates for six measures (total mortality, heart disease, lung cancer, breast cancer, stroke, and homicide) exceeded those of the other groups by a factor ranging from 2.5 to almost 10. Whites had the highest suicide rates and Native Americans the highest rates for motor vehicle accidents. Asian Americans lived longest (see Dressler, Oths, and Gravlee 2005).

Magdalena Hurtado and colleagues (2005) note that the life expectancy at birth for indigenous South Americans was at least 20 years shorter than that of other South Americans. The life expectancy of indigenous peoples in Brazil and Venezuela was lower than that in Sierra Leone, which had the world's lowest national life expectancy (Hurtado et al. 2005). What can applied anthropologists do to help improve health conditions among indigenous peoples? Hurtado and colleagues (2005) suggest three steps: (1) Identify the most pressing health problems; (2) gather information on possible solutions; and (3) implement solutions in partnership with the agencies that are in charge of public health programs for indigenous populations.

In many areas, the world system and colonialism worsened the health of indigenous peoples by spreading diseases, warfare, servitude, and other stressors. Traditionally and in ancient times, hunter-gatherers, because of their small numbers, mobility, and relative isolation from other groups, lacked most of the epidemic infectious diseases that affect agrarian and urban societies (Cohen and Armelagos, eds. 1984; Inhorn and Brown 1990). Epidemic diseases such as cholera, typhoid, and bubonic plague thrive in dense populations, and thus among farmers and city dwellers. The spread

of malaria has been linked to population growth and deforestation associated with food production.

Certain diseases, and physical conditions such as obesity, have spread with economic development and globalization (Baer, Singer, and Susser 2013; Inhorn and Wentzell 2012; Ulijaszek and Lofink 2006). Schistosomiasis, or bilharzia (liver flukes), is probably the fastest-spreading and most dangerous parasitic infection now known. It is propagated by snails that live in ponds, lakes, and waterways, usually ones created by irrigation projects. The applied anthropology approach to reducing such diseases is to see if local people perceive a connection between the vector (e.g., snails in the water) and the disease. If not, such information may be provided by enlisting active local groups, schools, and the media.

The highest global rates of HIV infection and AIDS-related deaths are in Africa, especially southern Africa. As it kills productive adults, AIDS leaves behind dependent children and seniors (Baro and Deubel 2006). In southern and eastern Africa, AIDS and other sexually transmitted diseases (STDs) have spread along highways, via encounters between truckers and prostitutes. STDs also are spread through prostitution as young men from rural areas seek wage work in cities, labor camps, and mines. When the men return home, they infect their wives. Cities also are prime sites of STD transmission in Europe, Asia, and North and South America. Cultural factors also affect the spread of HIV, which is less likely to be transmitted when men are circumcised.

The kinds of and incidence of disease vary among societies, and cultures perceive and treat illness differently. Health standards are cultural constructions that vary in time and space (Martin 1992). Still, all societies have what George Foster and Barbara Anderson call "disease-theory systems" to identify, classify, and explain illness. Foster and Anderson (1978) identified three basic theories about the causes of illness: personalistic, naturalistic, and emotionalistic. *Personalistic* disease theories blame illness on agents, such as sorcerers, witches, ghosts, or ancestral spirits.

Naturalistic disease theories explain illness in impersonal terms. One example is Western medicine, or biomedicine, which aims to link illness to scientifically demonstrated agents that bear no personal malice toward their victims (see Lupion 2012). Thus, Western medicine attributes illness to organisms (e.g., bacteria, viruses, fungi, or parasites), accidents, toxic materials, or genes. Other naturalistic systems blame poor health on unbalanced body fluids. Many Latin cultures classify food, drink, and environmental conditions as "hot" or "cold." People believe their health suffers when they eat or drink hot or cold substances together or under inappropriate conditions. For example, one shouldn't drink something cold after a hot bath or eat a pineapple (a "cold" fruit) when one is menstruating (a "hot" condition).

Emotionalistic disease theories assume that emotional experiences cause illness. For example, Latin Americans may develop *susto*, an illness caused by anxiety or fright (Bolton 1981; Finkler 1985). Its symptoms (lethargy, vagueness, distraction) are similar to those of "soul loss," a diagnosis of similar symptoms made by people in Madagascar. Modern psychoanalysis also focuses on the role of the emotions in physical and psychological well-being.

All societies have **health care systems** consisting of beliefs, customs, specialists, and techniques aimed at ensuring health and diagnosing and curing illness. A society's illness-causation theory is important for treatment. When illness has a personalistic

cause, shamans may be effective curers. They draw on varied techniques (occult and practical) that are part of their special expertise. A shaman may cure soul loss by enticing the spirit back into the body. Shamans may ease difficult childbirths by asking spirits to travel up the birth canal to guide the baby out (Lévi-Strauss 1967). A shaman may cure a cough by counteracting a curse or removing a substance introduced by a sorcerer.

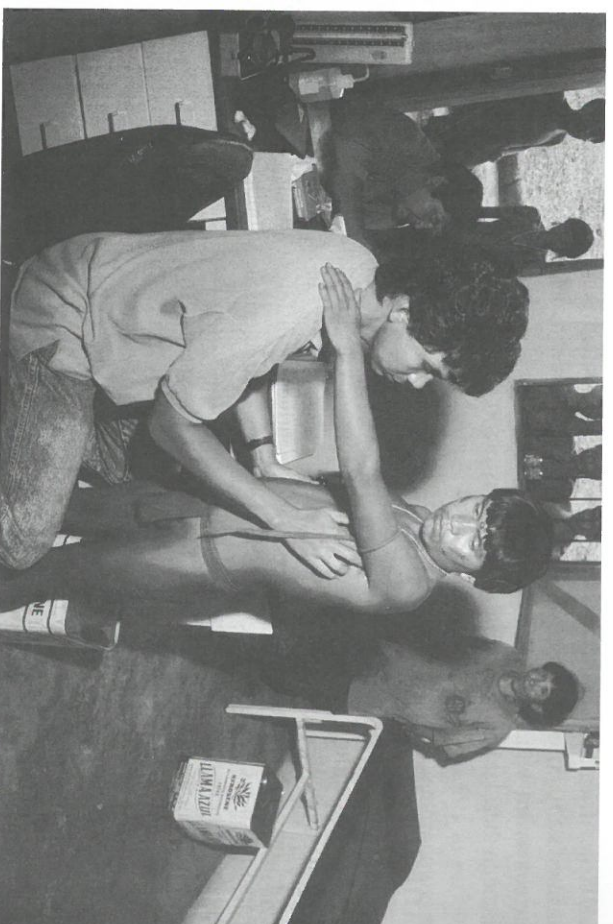
If there is a “world’s oldest profession” besides hunter and gatherer, it is curing, often a shaman. The curer’s role has some universal features (Foster and Anderson 1978). Thus, a **curer** emerges through a culturally defined process of selection (e.g., parental prodding, inheritance of the role, visions, dream instructions) and training (apprentice shamanism, medical school). Eventually, the curer is certified by older practitioners and acquires a professional image. Patients believe in the skills of the curer, whom they consult and compensate.

We should not lose sight, ethnocentrically, of the difference between **scientific medicine** and Western medicine *per se*. To be sure, there have been scientific advances in technology, genomics, molecular biology, pathology, surgery, diagnostics, and applications. However, many Western medical procedures have little justification in science, logic, or fact. Overprescription of drugs, unnecessary surgery, and the impersonality and inequality of the physician–patient relationship are questionable features of Western medical systems (see Briggs 2005 for linguistic aspects of this inequality). Also, overuse of antibiotics seems to be triggering an explosion of resistant microorganisms, which may pose a long-term global public health hazard.

Still, biomedicine surpasses tribal treatment in many ways. Although medicines such as quinine, coca, opium, ephedrine, and rauwolfia were discovered in nonindustrial societies, thousands of effective drugs are available today to treat myriad diseases. Today’s surgical procedures are much safer and more effective than those of traditional societies. But industrialization and globalization have spawned their own health problems. Modern stressors include uneven nutrition, dangerous machinery, impersonal work, isolation, poverty, homelessness, substance abuse, and noise, air, and water pollution (see McElroy and Townsend 2009). Health problems in industrial nations are caused as much by economic, social, political, and cultural factors as by pathogens. In modern North America, for example, poverty contributes to many illnesses, including arthritis, heart conditions, back problems, and hearing and vision impairment. Poverty also is a factor in the differential spread of infectious diseases.

In the United States and other developed countries, good health has become something of an ethical imperative (Foucault 1990). Individuals are expected to shape themselves in accordance with new medical knowledge. Those who do so acquire the status of *sanitary citizens*—people with proper, modern understanding of the body, health, and illness. Such citizens practice hygiene and look to health care professionals when they are sick. People who act differently (e.g., smokers, overeaters, those who avoid doctors) are blamed for their own health problems (Briggs 2005; Foucault 1990).

Even getting an epidemic disease such as cholera may be interpreted today as a moral failure. It’s assumed that people who act rationally can avoid “preventable” diseases. Individuals are expected to follow scientifically based imperatives (e.g., “boil water,” “don’t smoke”). People can become objects of avoidance and discrimination simply by belonging to a group seen as having a greater risk of disease or poor health (e.g., gay men, smokers, veterans) (Briggs 2005).



In Serra Parima, Brazil, a Yanomami Indian is examined at a field hospital. Such hospitals and clinics provide antibiotics, antimalarials, surgery, and preventive medicine.

Health interventions always have to fit into local cultures and be accepted by local people. When Western medicine is introduced, people usually retain many of their old methods while accepting new ones. Native curers may continue to treat certain conditions (spirit possession), while physicians deal with others. When patients get better, the native curer and the physician share the credit.

A more personal treatment of illness that emulates the non-Western curer–patient–community relationship might benefit Western systems. Western medicine tends to draw a rigid line between biomedical and psychological causation. Non-Western theories usually lack this sharp distinction, recognizing that poor health has intertwined physical, emotional, and social causes. The mind–body opposition is part of Western folk taxonomy, not of science (see also Brown and Barrett 2010; Helman 2007; Joralemon 2010; Strathern and Stewart 2010).

Medical anthropology also considers the impact of new scientific and medical techniques on ideas about life, death, and *personhood* (what it means to be a person). For decades, disagreements about personhood—such as when life begins and ends—have been part of political and religious discussions of contraception, abortion, assisted suicide, and euthanasia (mercy killing). More recent additions to such discussions include stem cells, “harvested” embryos, assisted reproduction, genetic screening, cloning, and life-prolonging medical treatments. How long should a human body be kept alive if there is no hope of recovery?

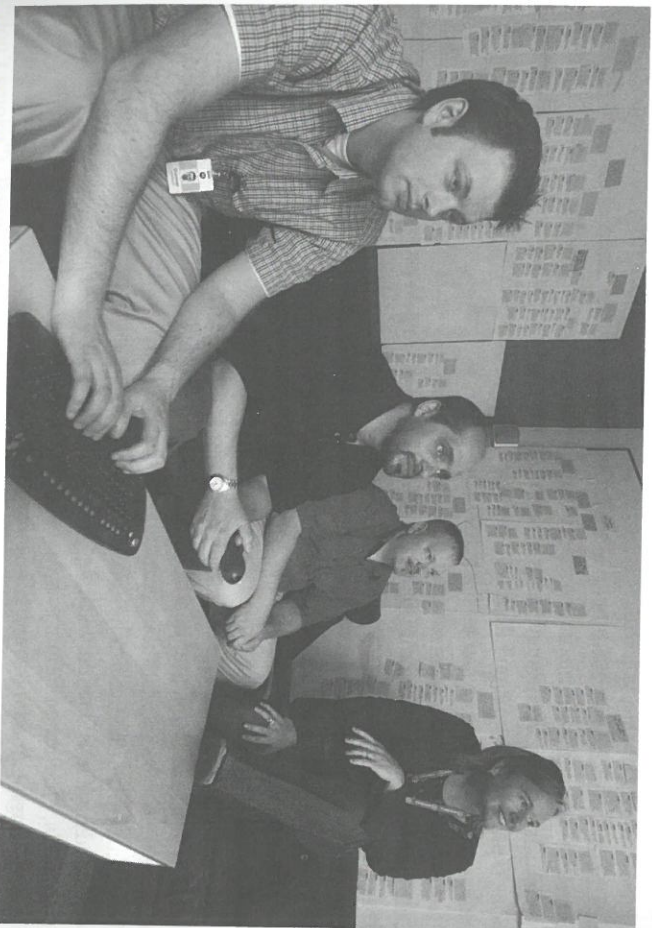
Sharon Kaufman and Lynn Morgan (2005) emphasize the contrast between what they call low-tech and high-tech life events. A desperately poor young mother dies of

AIDS in Africa, while half a world away an American child of privilege is born as a result of a \$50,000 in vitro fertilization procedure. Medical anthropologists increasingly are concerned with how the boundaries of life and death are being questioned and negotiated in the 21st century.

Anthropology and Business

For decades anthropologists have used ethnography to understand business settings (Jordan, A., 2003; Jordan, B., 2013). Ethnographic research in an auto factory, for example, may view workers, managers, and executives as different social categories participating in a common system. Each group has characteristic attitudes and behavior patterns. These are transmitted through *microculturation*, the process by which people learn particular roles within a limited social system. The free-ranging nature of ethnography takes the anthropologist back and forth from worker to executive. Each employee is both an individual with a personal viewpoint and a cultural creature whose perspective is, to some extent, shared with other members of his or her group. Applied anthropologists have acted as “cultural brokers,” translating managers’ goals or workers’ concerns to the other group (see Ferraro and Briody 2013).

Carol Taylor (1987) has stressed the value of an “anthropologist-in-residence” in a large, complex organization, such as a hospital or corporation (see also Briody and



Motorola staff anthropologist Crysta Metcalf (right) and her team sample a new technology at Motorola in Schaumburg, Illinois. This innovation allows people easily to communicate with others while watching the same televised show or event from different locations.

Trotter 2008; Jordan 2013). A free-ranging ethnographer can be a perceptive oddball when information and decisions typically move through a rigid hierarchy. If allowed to observe and converse freely with all types and levels of personnel, the anthropologist may acquire a unique perspective on organizational conditions and problems. Such high-tech companies as Xerox, IBM, and Apple have employed anthropologists in various roles. Closely observing how people actually use computer products, anthropologists have worked with engineers to design products that are more user-friendly.

Key features of anthropology that are of value to business include (1) ethnography and observation as ways of gathering data, (2) a focus on diversity, and (3) cross-cultural expertise. Hallmark Cards has hired anthropologists to observe parties, holidays, and celebrations of ethnic groups to improve its ability to design cards for targeted audiences. Applied anthropologists routinely go into people's homes to see how they actually use products (see Sunderland and Denny 2007 and the “Anthropology Today” at the end of this chapter).

Careers and Anthropology

Many college students find anthropology interesting and consider majoring in it. However, their parents or friends may discourage them by asking, “What kind of job are you going to get with an anthropology degree?” The first step in answering that question is to consider the more general question “What do you do with any college major?” The answer is “Not much, without a good bit of effort, thought, and planning.” A survey of graduates of the University of Michigan’s literary college showed that few had jobs that were clearly linked to their majors. Most professions, including medicine and law, require advanced degrees. Although many colleges offer bachelor’s degrees in engineering, business, accounting, and social work, master’s degrees often are needed to get the best jobs in those fields. Anthropologists, too, need an advanced degree, almost always a PhD, to find gainful employment in academic, museum, or applied anthropology.

A broad college education, and even a major in anthropology, can be an excellent foundation for success in many fields. One survey of women executives showed that most had not majored in business but in the social sciences or humanities. Only after graduating from college did they study business, leading to a master’s degree in business administration (MBA). Those executives felt that the breadth of their college educations had contributed to their business careers. Anthropology majors go on to medical, law, and business schools and find success in many professions that often have little explicit connection to anthropology.

Anthropology’s breadth provides knowledge and an outlook on the world that are useful in many kinds of work. For example, an anthropology major combined with a master’s degree in business is excellent preparation for work in international business. Breadth is anthropology’s hallmark. Anthropologists study people biologically, culturally, socially, and linguistically, across time and space, in various countries, in simple and complex settings. Most colleges offer anthropology courses that compare cultures, along with others that focus on particular world areas, such as Latin America, Asia, Africa, the Middle East, and Eastern Europe. The knowledge of foreign areas

Anthropology Today *Culturally Appropriate Marketing*

Innovation succeeds best when it is culturally appropriate. This axiom of applied anthropology could guide the international spread not only of development projects but also of businesses, such as fast food. Each time McDonald's or Burger King expands to a new nation, it must devise a culturally appropriate strategy for fitting into the new setting.

McDonald's has been very successful internationally. Almost 70 percent of its current annual revenue comes from sales outside the United States. As the world's most successful restaurant chain, McDonald's has more than 33,000 restaurants in 119 countries. One place where McDonald's has expanded successfully is Brazil, where 100 million middle-class people, most living in densely packed cities, provide a concentrated market for a fast-food chain. Still,

it took McDonald's some time to find the right marketing strategy for Brazil.

In 1980 when I visited Brazil after a seven-year absence, I first noticed, as a manifestation of Brazil's growing participation in the world economy, the appearance of two McDonald's restaurants in Rio de Janeiro. There wasn't much difference between Brazilian and American McDonald's. The restaurants looked alike. The menus were more or less the same, as was the taste of the quarter-pounders. I picked up an artifact, a white paper bag with yellow lettering, exactly like the take-out bags then used in American McDonald's. An advertising device, it carried several messages about how Brazilians could bring McDonald's into their lives. However, it seemed to me that McDonald's Brazilian ad campaign was missing some important points about

how fast food should be marketed in a culture that valued large, leisurely lunches.

The bag proclaimed, "You're going to enjoy the [McDonald's] difference," and listed several "favorite places where you can enjoy McDonald's products." This list confirmed that the marketing people were trying to adapt to Brazilian middle-class culture, but they were making some mistakes. "When you go out in the car with the kids" transferred the uniquely developed North American cultural combination of highways, affordable cars, and suburban living to the very different context of urban Brazil. A similar suggestion was "traveling to the country place." Even Brazilians who owned country places could not find McDonald's, still confined to the cities then, on the road. The ad creator had apparently never attempted to drive up to a fast-food restaurant in a neighborhood with no parking spaces.

Several other suggestions pointed customers toward the beach, where *cariocas* (Rio natives) do spend much of their leisure time. One could eat McDonald's products "after a dip in the ocean," "at a picnic at the beach," or "watching the surfers." These suggestions ignored the Brazilian custom of consuming cold things, such as beer, soft drinks, ice cream, and ham and cheese sandwiches, on the beach. Brazilians don't consider a hot, greasy hamburger proper beach food. They view the sea as "cold" and hamburgers as "hot"; they avoid "hot" foods at the beach.

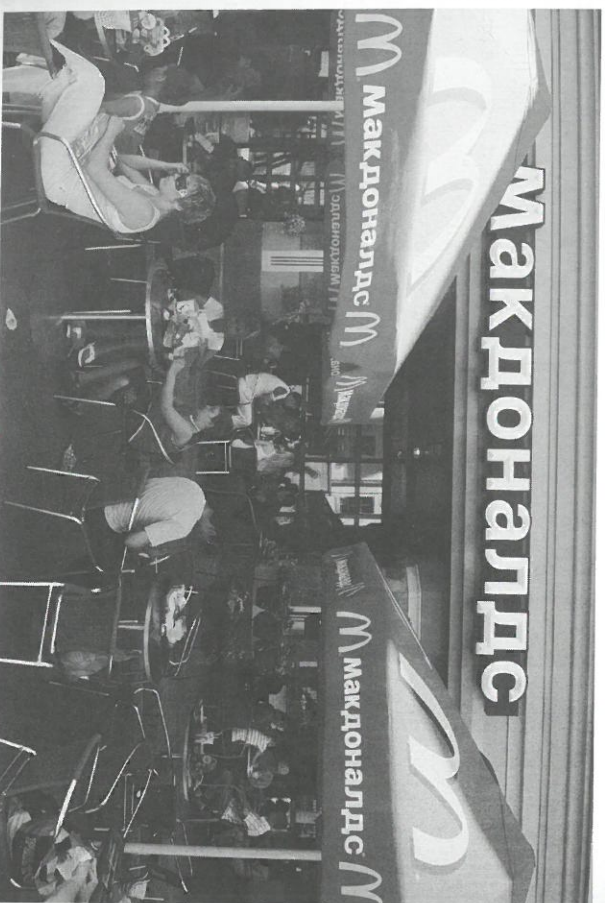
Also culturally dubious was the suggestion to eat McDonald's hamburgers "lunching at the office." Brazilians prefer their main meal at midday, often eating at a leisurely pace with business associates. Many firms serve ample lunches to their employees. Other workers take advantage

of a two-hour lunch break to go home to eat with the spouse and children. Nor did it make sense to suggest that children should eat hamburgers for lunch, since most kids attend school for half-day sessions and have lunch at home. Two other suggestions—"waiting for the bus" and "in the beauty parlor"—did describe common aspects of daily life in a Brazilian city. However, these settings have not proved especially inviting to hamburgers or fish filets.

The homes of Brazilians who can afford McDonald's products often have cooks and maids to do many of the things that fast-food restaurants do in the United States. The suggestion that McDonald's products be eaten "while watching your favorite television program" is culturally appropriate, because Brazilians watch TV a lot. However, Brazil's consuming classes can ask the cook to make a snack when hunger strikes. Indeed, much televiewing occurs during the light dinner served when the husband gets home from the office.

Most appropriate to the Brazilian lifestyle was the suggestion to enjoy McDonald's "on the cook's day off." Throughout Brazil, Sunday is that day. The Sunday pattern for middle-class families who live on the coast is a trip to the beach, liters of beer, a full midday meal around 3:00 p.m., and a light evening snack. McDonald's found its niche in the Sunday evening meal, when families flock to the fast-food restaurant.

McDonald's has expanded rapidly in Brazil, where, as in North America, young appetites have fueled the fast-food explosion. McDonald's outlets now dot urban neighborhoods throughout Brazil, and the cost of hiring in-home help has skyrocketed. Given these changes, Brazilian



A McDonald's restaurant in Kazan, capital of the Republic of Tatarstan, within Russia. Can you see any evidence that McDonald's is adapting to this cultural setting?

continued

Anthropology Today *continued*

teenagers increasingly use McDonald's for after-school snacks, and whole families have evening meals there. As an anthropologist could have predicted, the fast-food industry has not revolutionized Brazilian food and meal customs. Rather, McDonald's is succeeding because it has

adapted to preexisting Brazilian cultural patterns.

Once McDonald's realized that more money could be made by fitting in with, rather than trying to Americanize, Brazilian meal habits, it started aiming its advertising at that goal.

acquired in such courses can be useful in many jobs. Anthropology's comparative outlook and its focus on diverse lifestyles combine to provide an excellent foundation for overseas employment (see Omohundro 2001).

For work in contemporary North America as well, anthropology's focus on culture is increasingly relevant. Every day we hear about cultural differences and about problems whose solutions require a multicultural viewpoint—an ability to recognize and reconcile ethnic differences (see Kottak and Kozaitis 2012). Government, schools, hospitals, and businesses constantly deal with people from different social classes, ethnic groups, and cultural backgrounds. Physicians, attorneys, social workers, police officers, judges, teachers, and students can all do a better job if they understand cultural differences in a nation that is one of the most ethnically diverse in history.

Knowledge of the traditions and beliefs of the groups that make up a modern nation is important in planning and carrying out programs that affect those groups. Experience in planned social change—whether community organization in North America or economic development overseas—shows that a proper social study should be done before a project or policy is implemented. When local people want the change and it fits their lifestyle and traditions, it has a better chance of being successful, beneficial, and cost effective.

People with anthropology backgrounds do well in many fields. Even if one's job has little or nothing to do with anthropology in a formal or obvious sense, a background in anthropology provides a useful orientation when we work with our fellow human beings. For most of us, this means every day of our lives.

Summary

1. Applied anthropology uses anthropological perspectives, theory, methods, and data to identify, assess, and solve problems. Applied anthropologists have a range of employers. Examples are government agencies; development organizations; NGOs; tribal, ethnic, and interest groups; businesses; hospitals; social services; and educational agencies. Applied anthropologists come from all four subfields. Ethnography is one of applied anthropology's most valuable research tools.

2. Development anthropology focuses on social issues in, and the cultural dimension of, economic development. Not all governments seek to increase equality and end poverty. Resistance by elites to reform is typical. At the same time, local people rarely cooperate with projects requiring major and risky changes in their daily lives. Many projects seek to impose inappropriate property notions and incompatible social units on their intended beneficiaries. The best strategy for change is to base the social design for innovation on traditional social forms in each target area.
3. Anthropology and education researchers work in classrooms, homes, and other settings relevant to education and make policy recommendations based on their findings. Both academic and applied anthropologists study migration from rural areas to cities and across national boundaries. North America has become a popular arena for urban anthropological research on migration, ethnicity, poverty, and related topics. Although rural and urban are different social systems, there is cultural diffusion from one to the other.
4. Medical anthropology is a biocultural field that studies variation in health care systems, including disease, illness, health standards, and disease theories. In a given setting, the characteristic diseases reflect diet, population density, economy, and social complexity. Native theories of illness may be personalistic, naturalistic, or emotionalistic. In applying anthropology to business, the key features are (1) ethnography and observation as ways of gathering data, (2) a focus on diversity, and (3) cross-cultural expertise.

5. A broad college education, including anthropology and foreign-area courses, offers an excellent background for many fields. Anthropology's comparative, cross-cultural outlook provides an excellent basis for overseas employment. Even for work in North America, a focus on culture and cultural diversity is valuable. Anthropology majors attend medical, law, and business schools and succeed in many fields, some of which have little explicit connection with anthropology.

Key Terms

anthropology and education, 248	health care systems, 253	under-differentiation, 246
cure, 254	illness, 252	
development anthropology, 243	medical anthropology, 252	urban anthropology, 249
disease, 252	overinnovation, 245	
equity, increased, 244	scientific medicine, 254	