

than sharing, compassion, and nonviolent resolution of differences. As we saw in Chapter 3, many primatologists have evidence to show that, most of the time, most apes and monkeys do not live by the "law of the jungle." The law of the jungle is not a law after all.

Human beings, like all living organisms, are subject to evolutionary processes. Like other organisms, our species shares a gene pool whose different combinations, together with environmental input over the course of a lifetime, produce a range of different human phenotypes that develop over their lifetimes, incorporating a certain range of adaptive responses. But we are not like other organisms in all respects, and this is what makes the study of human nature, human society, and the human past necessary. To adapt to our environments—to make a living and replace ourselves—we have options that do not exist for other organisms: cultural adaptations that are passed on by learning, even when there is no biological reproduction (see Figure 5.5).

The rich heritage of human culture is the source of much wisdom to guide us in our moral dealings with one another. The more we learn about biology, however, the more we realize that neither genotypes nor phenotypes nor environmental pressures provide obvious answers to our questions about how to live. If anything, "nature" offers us mixed messages about what is, or is not, likely to promote survival and reproduction. And in any case, with the development of culture, for good or for ill, human beings have long been concerned not only with survival and reproduction but also with what it takes to lead a meaningful life. Physical life and a meaningful life usually, but not always, go together. This paradox has been part of the human condition for millennia and is likely to remain with us long after our contemporary scientific debates have become history.

in almost all climates, but it has also created new kinds of vulnerability. Our body temperature now depends on the price of clothing or fuel, whether we control our own furnaces or have them set by landlords, whether we work indoors or outdoors or leave places with stressful temperature regimes. . . . Thus our temperature regime is not a simple consequence of thermal needs but rather a consequence of social and economic conditions. (259)

Can We Predict the Future of Human Evolution?

Current arguments among evolutionary biologists illustrate their varied attempts to grasp the meaning of evolution. How we classify the natural world matters not only to scientists, who want to be sure their classifications match what they find when they go to nature, but also to non-scientists. How we make sense of evolution is important because people of all societies see a connection between the way they make sense of the natural world and the way they make sense of their own lives. Many people believe that human morality is, or ought to be, based on what is natural. For such people, evolutionary interpretations of nature can be threatening even if they portray a natural world that is orderly. If nature's order is dog-eat-dog and if human morality must be based on nature's order, then survival at any cost must be morally correct because it is "natural." This is clearly why many people found the more extreme claims of human sociology so repugnant. For those who want to root compassion and generosity in human nature, sociology offers a portrait of human nature in which such behavior has little or no value.

But perhaps the uncontrolled and uncontrollable pursuit of food and sex is no more natural in our species



FIGURE 5.5 An individual may have high cultural fitness and no genetic fitness at all. Here, a religious teacher who is celibate (thereby reducing her genetic fitness to zero) passes cultural knowledge to a new generation of other people's offspring.