

3

C H A P T E R

Social Psychology: The Impact of Other People



Imagine that you are at a party with some friends. One of them is talking about the Environmental Issues Club to which she belongs and its work on The Endangered Species Act (ESA). The ESA, a federal regulation adopted in 1973, makes it illegal to engage in any practice that threatens the extinction of a species, such as the Northern Spotted Owl or Chinook Salmon. (As I am writing this book, the U.S. Congress is considering revising or dropping the ESA because efforts to protect certain species hinder some industries, such as timber and aluminum companies.) Your friend explains that her group is collecting signatures to send to Congress to urge them *not* to change the ESA. You do not know much about the issue one

way or another, but you like your friend a lot, and decide, along with the rest of the people standing there, to sign her petition. After all, it does seem reasonable to try to protect species from extinction. Her argument that we humans do not have the right to let other species perish because of our human actions seems to make sense.

A few days later she calls you and thanks you for your support and tells you there is a meeting next week to learn more about the legislation and the grass roots efforts to save the ESA. As she is talking, you start thinking about the letter you read earlier that morning in the newspaper. It was written by a prominent community businessman and it argued that the ESA is a threat to American freedoms and the free market system. You thought the letter was well written and you see his point about government interference with business opportunities. Now you feel torn. What do you tell your friend? Will you go to the meeting? Are you more likely to go to the meeting because you previously signed the petition? How does your liking for your friend stack up against your respect for the businessman in influencing your decision? Is his opinion likely to weigh more because he's male?

In this example we see some important topics of **social psychology, which I am defining as the scientific study of social influence**. How do other people affect our thoughts, beliefs, attitudes, and behavior? How does our attraction and respect for others determine what we think and do? Does gender sway our responses? How about education, age, and political affiliation? How are environmental attitudes tied to deeper beliefs about our Western way of life and worldview? (How do you come to decide whether human beings have the right to knowingly extinguish other species?) Although we like to think that our attitudes and behaviors are based on rational and logical assessment of facts, a brief glimpse at social psychology reveals the enormously powerful (although usually unconscious) influences that other people have on us, our reasoning, our beliefs, and our behavior. The main point of this chapter is that our understandings and actions about environmental issues are largely social phenomena.

In this chapter we will discuss the historical roots of social psychology, survey some of its most important contributors and concepts, and describe some of the ways in which it has been applied to environmental issues. After examining a few classic studies in the field, we will look at the effects of gender in some detail, because gender illustrates how interpersonal relationships are directly linked to political and global structures that undermine ecological sustainability. By the end of this chapter I hope you will agree that what we do and what we believe arise from an intriguing composite of socially determined rules, expectations, explanations, and attractions, making our environmentally relevant behavior very much the outcome of social influence processes.

HITLER'S CONTRIBUTION TO SOCIAL PSYCHOLOGY

Although the first social psychology began in the 1890s when Norman Triplett demonstrated that people perform a simple task more quickly if they are in the presence of others,¹ the field of social psychology did not really flourish until the post-World War II years in the United States. It is easy to imagine how anyone observing the horrors of the Nazi holocaust would find the question of social influence enormously compelling. How could Hitler have persuaded the German people of their racial superiority and proceed with the appalling genocide of 6 million Jews? Are human beings so malleable that they can be talked into anything by anyone who happens to be melodramatic enough? Hitler's legacy troubled social psychology's pivotal thinkers and shaped their questions for many decades. The post-war McCarthy years in the United States only reinforced such concerns, as U.S. citizens were pressured to report their friends to the communist-hunting House Committee on Un-American Affairs.

The discipline's most important founder was Kurt Lewin (1890–1947), a Jewish scholar at the University of Berlin when Hitler became Chancellor of Germany. With the help of American colleagues, Lewin immigrated to the United States, where he obtained appointments at Cornell University and then the University of Iowa. At Iowa he founded the Center for Research on Group Dynamics. Lewin's brilliant intellect and interpersonal warmth inspired an important genealogy of social psychologists who identified a wide variety of social influence questions such as persuasion, conformity, leadership, obedience, and conflict resolution.

Social psychology proceeded to grow quickly under the inspired leadership of Lewin, his students, and his colleagues at the Center for Research on Group Dynamics. Lewin urged his students to design laboratory studies on important social problems. *Action research* was Lewin's term for scientifically sound studies focused on real world problems. Lewin is remembered fondly for his courage and creativity in stepping out of the artificially constrained laboratory, which was the dominant approach in psychology at the time, to work on the messier but more compelling social issues of his day. One of his most important studies examined the effects of autocratic, democratic, and laissez-faire leadership on the hostility, dependency, and productivity of boys in summer camp. Lewin designed this well-controlled but "real-life" experiment to address the destructive effects of fascism on group behavior.² With his passion for using psychology to solve human

problems, were he alive today, I believe he would enthusiastically join us in examining psychology's potential for addressing our pressing environmental difficulties.

OUR IRRATIONAL ATTEMPTS TO LOOK RATIONAL: COGNITIVE DISSONANCE THEORY

Lewin's most famous student was Leon Festinger (1919–1989). His intriguing theory of cognitive dissonance inspired an enormous amount of research, debate, and insight into the way social influence works. Festinger began his career with an interest in how people explain away their anxieties by making up explanations. To find out, he and two of his students infiltrated a religious cult, whose leader had professed the end of the world. Under secret cover, the researchers studied how cult members experienced and coped with their crisis, as phrased in Festinger's book title *When Prophecy Fails*. Assuming the world would go on, Festinger was curious about how the cult members would deal with the "unequivocal and undeniable evidence that [their] belief is wrong."³ What impressed the researchers was that the most ardent believers emerged from the experience more, rather than less, convinced of their accuracy. When faced with the painful contradiction between their beliefs and reality, the true believers found a new explanation: because of their prayer and goodness, God had decided to save the world.

Festinger's work on failed prophecy is reminiscent of the boomster/doomster debate we discussed in Chapter 1. When beliefs are strong, people are unlikely to change their minds simply because new information is available. Instead, contradictory "facts" are discounted, distorted, or disregarded so that the more hardy opinion remains undiminished. (That is probably why many people try to avoid discussions of religion or politics at the dinner table—we are more likely to change our opinion of our dinner partner than we are our strongly held positions.)

In more general terms, Festinger posited that whenever we experience a discrepancy between two opposing thoughts, cognitive dissonance exists. **Cognitive dissonance** produces an uncomfortable state of tension, which motivates us to take whatever steps we can to reduce it, meaning we will change whatever beliefs or behaviors we can most easily change in order to appear consistent. But we do not need such an extreme illustration of a religious cult to understand how dissonance reduction works. To go back to our opening example, Festinger would predict that your friend's telephone

¹Triplett, N., "The dynamogenic factors in pacemaking and competition," *American Journal of Psychology*, 9 (1898): 507–533.

²Lewin, K., Lippitt, R., and White, R. K., "Patterns of aggressive behavior in experimentally created 'social climates'," *Journal of Social Psychology*, 10 (1939): 271–299.

³Festinger, L., Schachter, S., and Reicken, H., *When Prophecy Fails* (Minneapolis: University of Minnesota Press, 1956).

call would create cognitive dissonance and you would be uncomfortable until you reduced it. Her request to attend the meeting would elicit two contradictory cognitions: on the one hand, you feel allegiance toward your friend, some agreement with her view about the importance of saving the ESA, and an urge to appear consistent with your recent signing of her petition; but on the other hand you also respect the importance of American freedoms, the articulate nature of the anti-ESA letter, and the businessman himself, so you feel some sentiment against the ESA. Festinger would predict that your motivation to resolve this conflict will lead you to diminish the importance of one viewpoint and elevate the importance of the other. For example, if you do agree to go to the meeting, you will be likely to find some reason why the businessman is not very convincing (perhaps you will decide that businesspeople are myopic about environmental problems); or if you refuse to go to the meeting, the letter will seem more convincing. (What else is more important to protect than American freedom?) Festinger emphasized the importance of postdecision shifts in our reasoning: once committed to a decision, we line up and rearrange our conflicting cognitions to fit it.

Festinger and his colleagues demonstrated the intriguing effects of cognitive dissonance in a wide range of laboratory experiments. In each case, people's attempts to appear rational and consistent resulted in behavior that was amusingly irrational. For example, consider the most famous cognitive dissonance experiment, which Festinger conducted with his colleague J. Merrill Carlsmith.⁴ They asked college students to perform some very boring tasks (such as turning spools or packing and repacking trays) for an hour. Then they asked their student subjects to lie to the next subjects by telling them that the experiment was actually interesting. In return, the experimenters offered to pay some of the liars \$1 and others \$20. Afterward, they asked their liars how they really felt about the experiment. What do you think the results were? Many people would predict that the people paid the bigger reward would tell the biggest lie, so that the \$20 liars would report more liking for the experiment. Instead, the subjects who were paid only \$1 said they found it more interesting than the subjects who were paid \$20. These results demonstrate how cognitive dissonance works. Apparently the \$20 subjects did not need to convince themselves that the experiment was interesting—they had a good external reason (lots of money) for telling a lie. But the \$1 subjects had a problem. They had also lied, but with no good external reason. Consequently, they changed their attitude toward the experiment—it was not really so bad—and reduced their dissonance.

⁴Festinger, L., and Carlsmith, J. M., "Cognitive consequences of forced compliance," *Journal of Abnormal and Social Psychology*, 58 (1959): 203–210.

These kinds of self-justification efforts are at the heart of dissonance reduction. They can lead us to change our attitudes in order to fit our behaviors.

Most of us reduce our cognitive dissonance over environmental problems by creating plausible but untrue explanations for our behavior. In uncertain situations, we bolster our decision by strengthening consistent cognitions and reducing the inconsistent ones. For example, unsure whether I should contribute money to an environmental cause presented to me in an umpteenth mass mailing appeal, I discard the plea, picturing the director in a fancy limousine and thinking to myself that "they probably spend way too much on overhead." Likewise, if you decide not to go to the ESA meeting, you are likely to prop up your decision by finding additional reasons: you do not have the time, or you have a competing commitment, or you might be coming down with a cold. These are not necessarily lies, but they are reasons that might not occur to you unless you needed them to justify your decision.

Of course, dissonance can also be used to increase environmentally appropriate behavior. One way this has been demonstrated is through the **foot-in-the-door technique**. If someone gets us to agree to a small action, they can often get us to undertake a bigger one. The foot-in-the-door technique would lead to the prediction that you will be more likely to go to the ESA meeting (a big action) because you previously signed the petition (a little action). Researchers have successfully used this technique to increase energy conservation behaviors. For example, a study done in 1980⁵ used families who had volunteered to participate in conservation studies and randomly assigned them to two groups. The first group was asked to agree to have their names published in the newspaper (they all agreed); the second group was not asked. Even though none of the names were ever published, the group that agreed to the public commitment showed a 15 percent greater reduction of gas use and a 20 percent greater reduction of electricity use than did the group which was not asked. Apparently, the intent to go public was enough to induce behavior change; people try to live up to their public image.

Similarly, in another foot-in-the door experiment, Hutton⁶ mailed water-flow restricters, together with information about conserving water, to a randomly selected set of households; to another set of households he sent the information but not the devices. The group that received the devices

⁵Pallak, M. S., Cook, D. A., and Sullivan, J. J., "Commitment and energy conservation," in Bickman, L., ed., *Applied Social Psychology Annual* (Beverly Hills, CA: Sage, 1980).

⁶Hutton, R. R., "Advertising and the Department of Energy campaign for energy conservation," *Journal of Advertising*, 11 (2) (1982): 27–39.

showed less water use. More importantly, however, this group also showed a variety of other conservation behaviors, such as turning down their hot water heaters, cleaning their furnaces, and installing automatic thermostats. As long as you start conserving in one area, you might as well do it in others: behavior changed attitudes, which in turn changed behavior. Likewise, Arbuthnot and his colleagues⁷ were able to increase recycling behavior simply by asking people to complete a survey about recycling or to send a prorecycling postcard to the city council. Getting people to adopt a small pro-environment behavior can lead them to adopt other pro-environment behaviors, presumably because behaviors are changed to maintain consistency with publicly expressed attitudes. Cognitive dissonance can work for or against environmentally appropriate behaviors.

ATTITUDES VERSUS BEHAVIOR: THE SPLIT BETWEEN PLANET AND SELF

The foot-in-the door technique suggests that we will change our attitudes to make them consistent with our behavior. Certainly we like to think our behavior is consistent with our attitudes, but we usually think of the reverse causal order: we think our attitudes determine our behavior, rather than the other way around. My common sense tells me that I recycle cans because I believe it is important to save energy; if someone told me I think it is important to save energy because I recycle cans, I would think that explanation bizarre. Most attempts to influence social behavior, including advertising and marketing, work on the common sense model: change what people believe and that will change their behavior. Environmental education seems like the first step to increasing environmentally responsible actions.

Yet social psychologists have learned a lot about attitudes that make this simple rule insufficient. As already discussed in Chapter 1, many people have pro-environment attitudes that are incongruent with environment behaviors. The gap between environmentally appropriate attitudes and actions is the social psychologist's way of examining the split between planet and self. If we suffered no split, our attitudes and actions would line up neatly. Unfortunately, they don't. But it isn't just in our environmental actions that we are hypocritical. Morally relevant attitudes fail to match individual behavior in a host of other areas. For example, most people claim

⁷Arbuthnot, J., Tedeschi, R., Wayner, M., Turner, J., Kressel, S., and Rush, R., "The induction of sustained recycling behavior through foot-in-the-door technique," *Journal of Environmental Systems*, 6 (1977): 355-368.

they are not racist, even though racist behaviors are, at some level, universal, especially in the most intimate situations (such as marriage or sex).⁸ Similarly, peoples' attitudes about cheating have little to do with whether or not they actually cheat.⁹ As social psychologist Robert Abelson noted, we are good at "finding reasons for what we do, but not very good at doing what we find reasons for."¹⁰

Not surprisingly, then, research on the relationship between environmental attitudes and behaviors has shown a lot of inconsistent results. Sometimes pro-environmental attitudes are correlated with pro-environment behavior (for example, people who think recycling is important are more likely to recycle). Sometimes pro-environmental attitudes are unrelated to behavior (for example, people who think use of fossil fuels should be reduced do not necessarily drive less than others). When different studies show contradictory results, it is often useful to do what social scientists call a meta-analysis. A **meta-analysis** looks for patterns across various studies in order to make sense of the contradictory data.

Jody Hines and her colleagues¹¹ did such a meta-analysis on environmental attitudes and behavior. By looking at the results of 128 different studies, they were able to show that the correlation between attitudes and behavior is positive, although not very strong. Attitudes and behavior are more tightly related when actual behavior, rather than self-reported behavior, is measured. For example, my neighbors' attitudes about recycling say more about how much they *actually* recycle than how much they *say* they recycle. Attitudes predict actual behaviors better than reported behaviors. Attitude/behavior consistency is also stronger when people belong to environmental organizations, when they hold a sense of personal responsibility, and when they verbally express their intentions to engage in responsible behaviors. From this study we can deduce three ways to enhance the consistency between pro-environmental attitudes and pro-environmental behaviors: join an environmental organization, maintain a sense of personal responsibility, and tell others about intentions to do environmentally responsible actions. We will return to these points at the close of

⁸Myers, D. G., *Social Psychology*, 4th ed. (New York: McGraw-Hill, 1993), p. 379.

⁹Wicker, A., "Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects," *Journal of Social Issues*, 25 (1969): 41-78.

¹⁰Abelson, R., "Are attitudes necessary?" in King, B. T., and McGinnies, E., eds., *Attitudes, Conflict, and Social Change* (New York: Academic Press, 1972). Quoted by Myers, *ibid.*, p. 112.

¹¹Hines, J. M., Hungerford, H. R., and Tomera, A. N., "Analysis and synthesis of research on responsible environmental behavior: A meta-analysis," *Journal of Environmental Education*, 18 (1986/7): 1-8.

the chapter when we consider how social psychology can help us heal the split between planet and self.

Studies of environmental attitudes have demonstrated the social bases of environmental concern. Interest in environmental problems is not randomly distributed across the population. Because we influence each other, certain demographic variables show predictable association with environmental concern. In a helpful review of this literature, environmental sociologists Kent Van Liere and Riley Dunlap describe the main findings and possible causes.¹² First, environmental concern is more prevalent among people with more education and in higher social classes. There are at least two possible explanations for this: (1) education could enhance environmental concern through reference group processes, by providing better information, or (2) default: those with less socioeconomic standing may have more immediate concerns (such as crime, disease, and hunger) than long-range environmental ones. (This point is expressed in the cartoon about Russia's environmental problems.)

Second, pro-environmental attitudes are more prevalent among younger than among older people. Perhaps young people are less integrated into the American economic system or dominant social paradigm or are more affected by recent environmental disasters such as Chernobyl or the Exxon Valdez oil spill because they have had less experience with the robustness of nature relative to these experiences with its fragility. Third, many studies have shown that urban residents are more concerned than rural residents. Urbanites may have experienced more environmental problems directly, and/or may be less dependent on economic growth than are small-town residents. Rural residents, living in closer contact with wilderness spaces may be less likely to romanticize nature and see it as a painting. Fourth, political affiliation is correlated with environmentalism. Environmentalists are more likely to be Democrats than Republicans, possibly because of their greater comfort with regulation and reforms and their weaker alignment with business and industry. Finally, for reasons that we will discuss shortly, women tend to have more environmental concerns than men, especially when it comes to hazards that have an impact on the local community or the health of the family.¹³

¹²Van Liere, K. D., and Dunlap, R. E., "The social bases of environmental concern: A review of the hypotheses, explanations, and empirical evidence," *Public Opinion Quarterly*, 44 (1980): 181-197.

¹³Mohai, P., "Men, women, and the environment: An examination of the gender gap in environmental concern and activism," *Society and Natural Resources*, 5 (1992): 1-19. See also Stern, P. C., Dietz, T., and Kalof, L., "Value orientations, gender, and environmental concern," *Environment and Behavior*, 25, (1993): 322-348.



Source: TOLES copyright 1992 and 1994 The Buffalo News. Reprinted with permission of UNIVERSAL PRESS SYNDICATE. All rights reserved.

Concern about environmental problems is strongly correlated with a person's worldview. Remember the multiple-choice questions at the beginning of Chapter 2? Those items were taken from a scale that measures people's agreement with the Dominant Social Paradigm (DSP)—the "common values, beliefs, and shared wisdom about the physical and social environments"¹⁴ that constitute our society's basic worldview. Among these dominant cultural beliefs are a commitment to laissez-faire government, individualism, progress, and growth. Dunlap and Van Liere¹⁵ have shown that people who strongly hold these values show less concern about environmental problems, such as population control, pollution control, resource conservation, environmental funding, and environmental regulations. People who think environmental problems are unimportant show

¹⁴Pirages, D. C., "Introduction: A social design for sustainable growth," in Pirages, D. C., ed., *The Sustainable Society* (New York: Praeger, 1977), pp. 1-13.

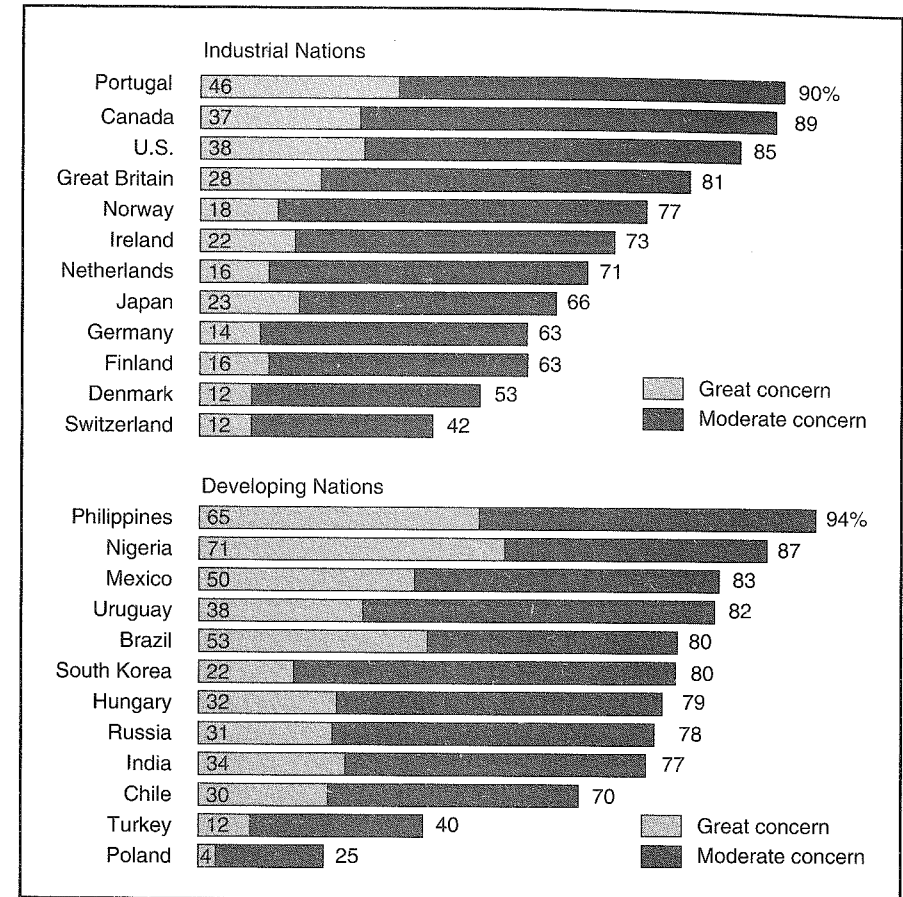
¹⁵Dunlap, R. E., and Van Liere, K. D., "Commitment to the dominant social paradigm and concern for environmental quality," *Social Science Quarterly*, 65(4) (1984): 1013-1028.

strong agreement with DSP items, such as support for the status quo (“We should know if something new will work before taking a chance on it”); distrust of government (“Regulation of business by government usually does more harm than good”); support for private property rights (“Property owners have an inherent right to use their land as they see fit”); faith in science and technology (“Most problems can be solved by applying more and better technology”); and support for economic growth (“The positive benefits of economic growth far outweigh any negative consequences”).

Conversely, Dunlap and Van Liere (and their colleagues)¹⁶ have demonstrated that people who hold a “New Environmental Paradigm” (NEP) are more environmentally concerned. That is, people who believe world ecological issues are pressing, who support pro-environmental policies, and who believe community air and water pollution are serious problems are likely to agree with NEP statements such as “We are approaching the limit of the number of people the Earth can support”; “If things continue on their present course, we will soon experience a major ecological catastrophe”; and “The balance of nature is very delicate and easily upset.” Moreover, research with the NEP scale between 1976 and 1990 shows significant increases in public endorsement. For example, “If things continue on their present course, we will soon experience a major ecological catastrophe” had 60 percent agreement in 1978 and 78 percent agreement in 1990. In line with data I described in Chapter 1, the American public appears to be increasing its support for the NEP and reducing its support for the DSP. Dunlap has also documented widespread environmental concerns in 22 other countries and demonstrated that people around the world believe that environmental problems are increasing¹⁷ (Figure 3.1).

One of the items on the NEP scale is “Plants and animals have as much right as humans to exist.” This gets us back to our problem of the ESA (Endangered Species Act). How do you come to decide whether other species have a right to exist? Dunlap’s research shows that your opinion on this question relates to a whole host of other beliefs about environmental limits, the delicacy of nature, and the threat of ecological catastrophe. And

Figure 3.1 “Environmental Concern is Global”



People in both developed and developing countries share concern about environmental problems. Answers to a 1993 Gallup poll conducted in 24 countries showed people have great to moderate concern when asked “How concerned are you personally about environmental problems?”

these views are influenced by your age, your political party, your education, and as we will see below, by your gender. You do not make up your mind on this question in isolation from other opinions you hold or opinions held by people you know. Environmental attitudes show consistency with your worldview and the worldviews of others around you, even if they show less consistency with your actual behavior. And because of the large amount of literature on gender bias, which we will discuss below, you are more likely to be persuaded by the businessman simply because he is male.

¹⁶Dunlap, R. E., Van Liere, K. D., Mertig, A. G., Catton, W. R., and Howell, R. E., “Measuring endorsement of an ecological worldview: A revised NEP scale.” Presented at the annual meeting of the Rural Sociological Society, The Pennsylvania State University, State College, August, 1992.

¹⁷Dunlap, R. E., Gallup, G. H., and Gallup, A. M., *The health of the planet* (Princeton, NJ: The George H. Gallup International Institute, 1992); also “Of global concern: Results of the health of the planet survey.” *Environment*, 35, (1993):6–15; 33–39.

ATTRIBUTION THEORY: MAKING UP MEANING

We like to think of our own behavior as logical and consistent, and we keep busy trying to explain it to maintain this order. Worldviews are an example of the human effort to maintain a coherent picture of reality, people, and their relationship to nature. And we are just as busy trying to explain other people's behavior and beliefs as we are our own. Social psychologists call our strong tendency to attribute behavior to various causes the **attribution process**. We rarely see the social world strictly in terms of overt behaviors. Instead we are continuously attributing those behaviors to our constructed explanations. She smiles because she is friendly. He sits alone because he is shy. Attributions help us make sense of our social world, help us create a sense of order and consistency, and provide convenient short-cuts for interacting with others. But sometimes attributions get in our way.

For example, most of us constantly make the **fundamental attribution error**. We overestimate the degree to which other peoples' behaviors are due to their personal traits, and underestimate the degree to which they are caused by the situation. When I see my colleague drive his car two blocks to the library, I am likely to explain that behavior as laziness and lack of awareness about environmental issues; I am less likely to attribute it to the possibility that he has to carry 14 books back; but when I drive my car around the campus to the library, it is obviously due to the situational demand of returning so many books. I am not lazy, but he is. Most of our attribution problems come from these kinds of self-serving biases: we like to think of ourselves in favorable ways, and resist explanations that are uncomplimentary.

The tendency to make attributions that save us from personal discomfort can seriously impede our ability to learn environmentally appropriate behaviors. For example, most people like to think of themselves as well informed. But when social psychologist Dane Archer and colleagues surveyed California residents, they found huge discrepancies between how much people claimed they knew about energy conservation and how much they really knew. Using an objective test to measure knowledge, people predicted they knew from half to two thirds of the answers; instead their actual scores ranged from 1.4 to 41 percent.¹⁸ Similarly, most people like to think that they are not wasting energy and will go to impressive lengths to

¹⁸Archer, D., Aronson, E., Pettigrew, T. F., Condelli, L., Curbow, B., McLeod, B., and White, L. T., *An Evaluation of the Energy Conservation Research of California's Major Utility Companies, 1977-1980*. Report to the California Public Utilities Commission, February 10, 1983. Energy Conservation Research Group, Stevenson College, University of California, Santa Cruz, CA 95064.

explain away evidence that shows they are. For example, Hackett has demonstrated that people like to think of their energy consumption as normal, and will use creative attributions to maintain that view, as the following explanation from a utility user illustrates:

I had gotten my PG&E bill and said out loud about how awful it was and she (a little old lady) looked at me and said "oh, I don't pay anything like that." It turned out her apartment is the same size as mine but she said she paid only about \$20 a month for heat. I couldn't believe it. I've thought about that so much. She was really tiny, real small, though, not like me. I think maybe these real little old ladies just don't have much meat on their bones, so they don't need much heat to get warmed up.¹⁹

THE RATIONALITY OF IRRATIONAL BEHAVIOR

From the outside, lying about how much fun a boring experiment is or explaining away the end of the world or a higher energy bill all look pretty irrational. So does a lot of other behavior that social psychologists have observed in the laboratory. The frequency and ease with which social psychologists have been able to induce illogical behavior in the laboratory has led one of Festinger's most gifted and productive students, Elliot Aronson, to conclude that "people who do crazy things are not necessarily crazy."²⁰ Instead of attributing our behavior to personal characteristics of the individual, social psychologists instead look to the situation to examine the social forces that induce us to behave irrationally.

A particularly important and controversial example of such research was conducted in the 1960s by Stanley Milgram.²¹ Milgram wanted to know what situational factors would induce people to be obedient—obedient even to unreasonable demands, made by someone hardly known to the person. (Notice again Hitler's legacy in social psychology.) To study this phenomenon, Milgram asked his male subjects to "teach" another man a list of vocabulary words by administering punishment whenever he made a mistake. The punishment was an electric shock, which the subject believed was delivered to the "learner." (No shocks were actually delivered, but the subject did not know this). To Milgram's (and many other social scientists') amazement, the majority of people who participated in this experiment

¹⁹Hackett, B., "Energy billing systems and the social control of energy use in a California apartment complex," in Morrison, B. M., and Kempton, W., eds., *Families and Energy: Coping with Uncertainty* (East Lansing: Michigan State University, 1984), p. 298.

²⁰Aronson, E., *The Social Animal*, 7th ed. (New York: W.H. Freeman & Co., 1995), p. 9.

²¹Milgram, S., *Obedience to Authority* (New York: Harper and Row, 1974).

were unbelievably obedient, continuing to deliver electric shocks even after they were led to believe that they had inflicted serious harm (possibly death) to the “learner.” Under the situational demands of a stern experimenter and “scientific” laboratory setting, most subjects obeyed the commands, even though they showed concern and worry about the well-being of the “learner.”

Likewise, Philip Zimbardo demonstrated the power of situational influences by setting up a mock prison in the basement of a Stanford University building. College men were randomly assigned to play the roles of guards or prisoners in a 2-week simulation. But as Zimbardo describes it

at the end of only six days we had to close down our mock prison because what we saw was frightening. It was no longer apparent to us or most of the subjects where they ended and their roles began. The majority had indeed become “prisoners” or “guards,” no longer clearly able to differentiate between role-playing and self. . . . In less than a week, the experience of imprisonment undid (temporarily) a lifetime of learning; human values were suspended, self-concepts were challenged, and the ugliest, most base, pathological side of human nature surfaced.²²

Like Milgram’s subjects, Zimbardo’s responded to the situational demands with inhumane and brutal behavior. Yet these same people, removed from those social situations, were not horrible people: Zimbardo’s subjects were talented and intelligent Stanford University college men; Milgram’s were fathers and husbands, conscientious workers and citizens. Much like the Nazis who committed atrocities by day and went home to their loving families in the evening, something in these situations caused otherwise normal people to behave quite abnormally.

How could these people behave so horribly? Is human nature basically evil? Instead of looking for internal explanations like evil, a social psychological explanation would focus on the situation instead, specifically, the norms and roles that these situations supported. A **norm** is an implicit rule, an expectation about what kind of behavior is appropriate in a given situation. A **role** is a set of norms that accompany any particular relationship to other people in that situation. In the Milgram simulation, obedience to the experimenter was maintained by norms, supported by the professional appearance of the laboratory, by the explicit demands of the experimenter, and by the lack of any social support for disobedience. Milgram’s subjects were instructed to play the role of “teacher” and were taught how to ad-

²²Zimbardo, P. The psychological power and pathology of imprisonment (p. 3). Statement prepared for the U.S. House of Representatives Committee on the Judiciary; Subcommittee #3: Hearings on Prison Reform, San Francisco, October 5, 1971. Quoted by Aronson, *ibid.*, p. 11.

minister the punishments that the role required. No other information about choices was given. If, as in later variations of the experiment, subjects had an opportunity to observe another “teacher” refusing to obey the experimenter, obedience dropped significantly. A new norm was introduced by a disobedient “teacher.”

Likewise, in the Zimbardo prison simulation, subjects wore costumes that reduced their sense of personal identity and responsibility (dark glasses for the guards, numbers for the prisoners) while the prison environment elicited norms of brutality and cruelty. Our stereotypes of guards and prisoners were enough to define the roles and norms of that situation. Those roles and norms became so powerful that they superseded the roles and norms that ordinarily prevailed—even for the experimenter. At one point in the experiment, a colleague wandered down to the basement and asked Zimbardo about the specifics of the experiment he was running. Zimbardo reports that he was so upset about a possible prison revolt that was about to happen that he did not have time to answer this academic nunny’s questions about some abstract experiment. Zimbardo’s role as prison chief became more salient than his ordinary role as social scientist.²³

While these laboratory situations are extreme (and so controversial on ethical grounds that they cannot be run today), norms and role expectations continually shape our behavior, whether or not we are aware of them. We constantly “read” a social setting for what is appropriate language, manner, gestures, and behavior. We become so dependent on these cues that we notice their importance only when we have trouble deciphering them. For example, you are much more likely to sign the petition if everyone else at the party is signing it—others communicate a norm that is easy to read. In the absence of knowing what is expected, our behavior is more uncertain (when you receive a telephone call, it is not so easy to read the norm, because other people are not present to demonstrate their reactions). This is not to say that everyone conforms in all situations, but that when we are uncertain about an action, we look to situational cues to help us decide what to do.

FROM NORMS TO ENVIRONMENTALLY APPROPRIATE BEHAVIOR

A good example of how norms are communicated with respect to littering behavior was conducted by social psychologist Robert Cialdini and his col-

²³Zimbardo, P. G., Haney, C. W., Banks, W. C., and Jaffe, D. N., The Stanford prison experiment. A slide/tape presentation produced by Philip G. Zimbardo, Inc., P. O. Box 4395, Stanford, CA 94305.

leagues.²⁴ They placed handbills on the windshields of cars in a parking garage. Drivers approaching their cars from the garage elevator experienced one of two conditions: either the garage was littered with many of these handbills, or the garage was clean and litter-free. The experimenters observed what the drivers did with the handbill on their windshield. Knowing something about norms and how they are communicated, what would you predict? Drivers were far more likely to throw their handbill on the ground in the already littered garage. This experiment explains to me something I could never figure out about the neighborhood where I once lived in South London. The streets were constantly blowing with litter, and I often observed Londoners contributing even more to it. As an American, I was revolted by such behavior, and thought my fellow neighbors crass and insensitive. A more social psychological explanation would be that the litter continued by virtue of the norm it expressed.

Norms can be transmitted by the particular features of a situation, or by hearing about what other people are doing. **Social diffusion** occurs when people change their behavior in line with what others do. Like a fashion that spreads throughout a group, environmentally appropriate behavior can be induced through one's acquaintances. Your personal relationship with your ESA friend, as well as the ESA-relevant attitudes of your other friends, are going to be important determinants of your response to her request. Likewise, research has shown that the best predictor of whether people purchase solar equipment is the number of acquaintances they have who currently own such equipment.²⁵ Thus, the more friends you have who support the ESA, the more likely you are to support it yourself.

Conformity to group norms is an important determinant of our beliefs and behavior. Whether or not you notice it, your viewpoints and actions are powerfully shaped by the people who surround you. One of social psychology's most classic studies demonstrated this point at Bennington College in the 1930s, where the faculty expressed quite liberal political attitudes. Bennington's women students came from politically conservative families, but as they continued their education at Bennington, their attitudes became progressively more liberal. Newcomb explained this influence as the effect of a new reference group. A **reference group** is any constellation of people whom we use as standards to evaluate our attitudes, abilities, or current situation. As the freshmen came to campus they left behind the reference

²⁴Cialdini, R. B., Kallgren, C. A., and Reno, R. R., "A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior," *Advances in Experimental Social Psychology*, 24 (1991): 201-234.

²⁵Leonard-Barton, D., "The diffusion of active-residential solar energy equipment in California," in Shama, A., ed., *Marketing Solar Energy Innovations* (New York: Praeger, 1981), pp. 243-257.

group of their conservative families and adopted the new reference group of faculty and upperclassmen. Newcomb also showed that the social diffusion spread through **proximity**: women who lived near each other and were likely to see each other often had more influence on each other than those who were spatially more distanced.²⁶

Spatial proximity is certainly not necessary for successful social diffusion, however, as researcher Michael Dennis and his colleagues have demonstrated. Here is their solution for getting architects to implement energy-efficient building designs:

The Washington Energy Office enlisted high-profile architects and builders and used highly publicized meetings between the governor, the builders, and the building owners in designing its Energy Edge program. . . . The Energy Edge program made energy-efficient design prestigious and a status symbol for new buildings. Smaller, lesser known developers indirectly disseminated the technology by imitating the program's features.²⁷

Obviously, people do not pay attention just to the facts. They pay attention to a host of other variables, including the social status of the person communicating the message. Social diffusion depends in part on status. We are much more likely to imitate or be persuaded by someone of a higher status than of a lower status. One of the earliest findings in social psychology is that the **credibility of the source** makes a difference. If exactly the same information is presented by two different people, we will be more persuaded by the one we believe has more credibility. That is why New York City residents cut their electricity use by 7 percent when asked in a letter with New York State Public Service Commission letterhead. But when the same letter was sent on Con Edison stationery, the plea had no effect. Apparently, people trusted or respected the Public Service Commission more than they did Con Edison.²⁸

These kinds of studies demonstrate our prejudices and stereotypes. In another example, the same research article was evaluated more favorably when the author was named John T. McKay than Joan T. McKay.²⁹ **Gender bias**, the unequal valuing of males and females, is so important to our understanding of global environmental problems that I want to spend some

²⁶Newcomb, T. M., *Personality and Social Change: Attitude Formation in a Social Community* (New York: Dryden Press, 1943).

²⁷Dennis, M. L., Soderstrom, E. J., Koncinski, W. S., and Cavanaugh, B., "Effective dissemination of energy-related information: Applying social psychology and evaluation research," *American Psychologist*, 45 (19) (1990): 1109-1117, p. 1115.

²⁸Craig, C. S., and McCann, J. M., "Assessing communication effects on energy conservation," *Journal of Consumer Research*, 5 (1978): 82-88.

²⁹Goldberg, P., "Are women prejudiced against women?" *Transaction* (April 1968): 28-30.

time examining what social psychology knows about it. In order to understand the social psychological barriers to a sustainable society, we must discuss the harmful ways in which females are considered inferior to males throughout the world.

IT'S STILL A MAN'S WORLD

What, you might ask, does the oppression of women have to do with building a sustainable society? The traditional view, one held by many people interested in environmental problems, is that we should work on solving our environmental difficulties first and worry about social equality second. From a social psychology point of view, however, we are unlikely to solve our environmental problems until we examine the social structures that have created them. More specifically, we will not go far in resolving our difficulties before we confront and counteract the global gender bias that drives them.

Gender bias is a newer but quite important topic in social psychology, having gained considerable attention in the 1970s and 1980s as the American women's movement flourished. I am going to discuss gender bias in some detail because it contributes to global environmental deterioration in several ways. First, as I mentioned in Chapter 1, it fuels overpopulation, especially in many Third World countries, through at least two related mechanisms: (1) because women are denied education and thus economic security, their only insurance policy for their old age is the number of children who can take care of them, and (2) because males are so much more valued than females, families continue to have babies until enough male offspring are produced.

As I am writing this chapter (September 1994), the United Nations Conference on Population and Development is meeting in Cairo. As many critics are pointing out, we have traditionally approached population control as a medical problem, by focusing on the medical and technical features of birth control, and the distribution of information and contraception to families in Third World countries. Agency for International Development (AID) has worked on "supply side" contraception, assuming that if families have access to birth control methods, they will want to use them. AID has funded family planning programs that distribute contraception and education through medical and health facilities. Such programs have helped bring down birth rates in some countries, such as China, Indonesia, and Brazil. In many more countries such as India, Egypt, Bangladesh, Pakistan, and Nigeria, however, family planning efforts have produced poor results.³⁰

More recent discussions concentrate on the plight of women and their decision to have more children under conditions of poverty. Without access to employment or community food supply, females depend on their children to take care of them in old age. This is why female literacy is a better predictor of lowered birth rates than availability of contraception, the strength of the Catholic Church in the community, or any other of a number of factors that would seem to affect family size.³¹ When women have no economic security other than the number of (in many countries male) offspring, they will continue to have more children. Thus, many experts have now agreed that the best way to bring a country's birth rate down is to improve the education of its women. In most of the less-developed countries, women are uneducated and illiterate and have no legal rights to own land, borrow money, or work for wages. Although they do two thirds of the world's work they are paid less than one tenth of the world's income, and own 1 percent of the world's land. The only security a poor rural woman will have in her old age is that which her sons provide. Consequently, it is rational to have as many sons as possible. As Worldwatch researcher Jodi Jacobson states:

Gender bias is . . . the single most important cause of rapid population growth. Where women have little access to productive resources, and little control over family income, they depend on children for social status and economic security. A necessary step in reducing births voluntarily, then, is to increase women's productivity and their control over resources.³²

Gender bias also undermines global environmental health by ignoring women's knowledge and expertise about sustainable agriculture. And it contributes to excessive investment of public wealth into military organizations, which siphon off resources from environmental and domestic welfare and contribute to environmental destruction in their own ways. I will discuss evidence for each of these claims below.

But we do not have to go to exotic Third World countries to see the impact of gender bias on environmental issues. In our own culture, our language and our differing roles as males and females give gender dimensions to our problems. With regard to language, ecofeminists such as Carolyn Merchant and Susan Griffin have argued that our tendency to see nature as female (with such terms as Mother Earth, Mother Nature, virgin territory) helps us maintain an abusive attitude toward it, as if Mother will provide, no matter what we do to her, or is a virgin simply waiting for penetration.³³ Furthermore, in industrialized and developing countries alike, women are more likely to worry about environmental hazards than are men, and more

³⁰Jacobson, J. L., *Gender Bias: Roadblock to Sustainable Development* (Worldwatch paper no. 110) (Washington DC: Worldwatch Institute, 1992).

³¹Kennedy, P., *Preparing for the Twenty First Century* (New York: Random House, 1993).

³²Jacobson, *ibid.*, p. 7.

likely to become politically active in environmental issues than other issues, especially if the hazards have an impact on the local community and/or their families. As caretakers, women tend to be more concerned than men about the physical health of their families.

Before discussing more specific evidence for each of these claims, let us talk more generally about what social psychologists know about gender bias and how it is maintained. As we examine this problem, it is important to understand that *I am not trying to blame our environmental problems on men alone*. I believe that both men and women around the world contribute to our global predicament through gender bias because both use the mistaken assumption that men are more important than women. Women collude with men on this assumption. Concomitantly, I also believe that we cannot solve our problems by simply switching the gender bias to its opposite: thinking that women are more important, intelligent, or able to solve our environmental problems than men. The complicated and linked problems of environmental deterioration, international development, militarism, and sexism will require the best efforts of all of us, male and female, to design and implement solutions.

Now, what do social psychologists know about gender bias and how it operates? First, gender bias is universal. Cultures vary enormously on how differential the status is between men and women, but in all cultures we have studied, men have access to some privilege or opportunity, some power or status that is denied to women.³⁴ In our own culture, the glass ceiling of highest governmental offices and corporate executive positions demonstrates this fact: while women comprise 51 percent of the population, throughout the 1980s they made up 3 percent of the top appointments in the 1000 largest corporations and 99 percent of secretaries; only 8.5 percent of the U.S. Congress were women, and by the mid-1990s, we have yet to elect a female President or Vice President. In the United States women now earn 72 percent of what men who work at the same job earn, with exactly the same education and experience.³⁵ Globally, women work longer hours than do men, who rarely share in domes-

tic chores. In developing countries women spend 12 to 18 hours a day laboring, as compared with 8 to 12 hours a day for men.³⁶

In developing countries women are far worse off relative to their male counterparts than women in industrialized countries. A recent United Nations project measured the well-being of men and women across nations and demonstrated the global gender gap. Access to education, health care, employment, and decision making were calculated to form a Human Development Index (HDI), expressing the degree to which people have the options that enable them to "lead a long and healthy life, to be knowledgeable, and to find access to the assets, employment and income needed for a decent standard of living."³⁷ The HDIs for men and women of selected nations is given in Figure 3.2. Note that even the richest countries of Sweden and Finland show a gender gap, but that this gap increases as the countries become poorer.

It may be difficult to see the impact of gender bias because in the United States, overt expressions of sexism are quickly diminishing, paralleling a decrease in overt expressions of racism. Just as the word "nigger" has virtually disappeared from common usage in the past 50 years, so too do people express much less explicit sexism. Most people claim to believe that women are just as talented, intelligent, or capable as men. For example, in 1988, 9 of 10 people said they would vote for a qualified woman for President, whereas 50 years ago, only 1 in 3 said they would. Recent attempts to replicate the "John T. versus Joan T. McKay" study have shown that it fails to produce the striking gender bias that it did in 1968; most often it produces no difference in judgment of work.³⁸

Nevertheless, more subtle forms of sexism are still widespread in the United States (and in other cultures, the forms are still quite explicit). In the United States, behavioral measures show that women are discriminated against in commercial situations such as negotiating for a car price³⁹ and being served by a sales clerk in a department store.⁴⁰ When competing for a job with exactly the same qualifications as a man, a woman is less likely to be selected, in spite of Affirmative Action policies. Although there is widespread endorsement of equal opportunity, sexism still exists and hinders women's opportunities. This is because verbal statements are often superficial indicators of true sentiment. For example, in a study of latent sexism, men who were led to believe that the experimenter could read their true at-

³³Merchant, C., *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco: HarperSanFrancisco, 1983). Griffin, S., *Woman and Nature: The Roaring Inside Her* (New York: Harper and Row, 1978).

³⁴Ortner, S. B., "Is female to male as nature is to culture?" in Rosaldo, M., and Lamphere, L., eds., *Women, Culture, and Society* (Stanford, CA: Stanford University Press, 1974), pp. 67-87.

³⁵Olsen, J. E., and Frieze, I. H., "Income determinants for women in business," in Stromberg, A. H., Larwood, L., and Gutek, B. A., eds., *Women and Work*, vol. 2 (Newbury park, CA Sage, 1987), pp. 173-208. O'Neil, J., "The trend in male-female wage gap in the United States," *Journal of Labor Economics*, 3 (1985): S91-S116.

³⁶Jacobson, *ibid.*, p. 15.

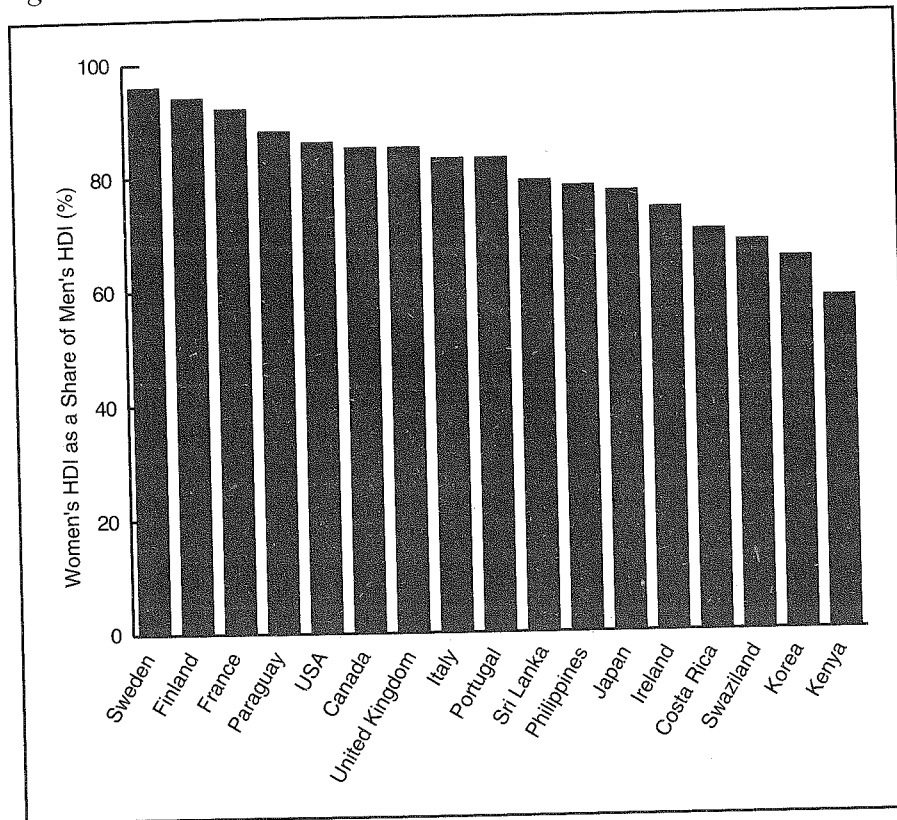
³⁷*ibid.*, p. 34.

³⁸Myers, *ibid.*, pp. 383-384.

³⁹Ayres, I., "Fair driving: Gender and race discrimination in retail car negotiations," *Harvard Law Review*, 104 (1991): 817-872.

⁴⁰Zinkhan, G. M., and Stoiadin, L. F., "Impact of sex role stereotypes on service priority in department stores," *Journal of Applied Psychology*, 69 (1984): 691-693.

Figure 3.2 "Gender Bias is Global"



Around the world, men have more advantages than women, especially in poorer countries. The "Human Development Index" (HDI) is a measure developed by the United Nations to quantify the degree to which people have access to nutritional food, medical care, and income needed for a decent standard of living. Women lag behind men in every country for which data are available. A sample of 17 countries is shown here.

Source: Jacobson, J. L., Gender Bias as a Roadblock to Sustainable Development. (Worldwatch, paper #10) (Washington, D. C.: Worldwatch Institute, 1992) p. 11. Reprinted by permission

titudes with a lie detector showed less agreement for women's rights than men who were questioned without the lie detector.⁴¹ As with racism, latent sexism still operates even though most people deny they are sexist.

Sexism, like racism and other forms of prejudice, is enhanced by personal, social, or economic insecurity. During periods of frustration, a lower-status group becomes a scapegoat for displaced fear and hostility. For ex-

ample, acts of racial hatred such as lynchings and house burnings occur more often when economic conditions are harsh. Prejudice is also linked to personal anxieties. When researchers at Washington State University asked men to evaluate women on a videotape, men with the lowest self-esteem assessed strong, nontraditional women in negative terms; men with higher self-acceptance preferred them.⁴²

Maintaining Gender Bias: Four Mechanisms

In its more subtle forms, gender bias is maintained in at least four ways: through attribution processes, through language, through media representations, and through scientific research. Let us examine each of these in turn.

Attribution Processes How would you explain the eminence of a highly successful male physician? You would likely attribute it to a combination of talent and hard work. But when people are asked to explain the success of an eminent female physician, they are more likely to attribute it to effort, rather than to talent.⁴³ Because of a subtle belief that men are more talented than women, people more frequently attribute women's successes to luck or effort. So even though people would say they are not sexist, these attribution studies show they are. And although younger people show less sexism than older people, stereotypes of female disability are still strong among children and teenagers. For example, when high school students were asked to explain the successes of a medical student after reading his or her impressive biography, ability was attributed to the male medical student, while effort, luck, or (worse yet) cheating were attributed to the female student.⁴⁴ Even children in grade school explain female success on mechanical tasks as due to effort and male success as due to ability.⁴⁵

Language Language codes and reinforces gender bias in several different ways. First, words for males and females that are superficially equivalent reveal negative connotations for females. For example, consider the distinction

⁴²Grube, J. W., Kleinhesselink, R. R., and Kearney, K. A., "Male self-acceptance and attraction toward women," *Personality and Social Psychology Bulletin*, 8 (1982): 107-112.

⁴³Feldman-Summers, S., and Kiesler, J., "Those who are number two try harder: The effects of sex on attributions of causality," *Journal of Personality and Social Psychology*, 30 (1974): 846-855.

⁴⁴Feather, N. T., and Simon, J. G., "Reactions to male and female success and failure in sex-linked occupations: Impressions of personality, causal attributions, and perceived likelihood of different consequences," *Journal of Personality and Social Psychology*, 31 (1975): 20-31.

⁴⁵Etaugh, C., and Brown, B., "Perceiving the causes of success and failure of male and female performers," *Developmental Psychology*, 11 (1975): 103.

⁴¹Myers, *ibid.*, p. 384.

between bachelor versus spinster, master versus mistress, manly versus effeminate, wizard versus witch, stud versus bitch, and misogyny versus (?) (although "misandry" means hatred of men, it is rarely used; misanthropy means hatred of people).⁴⁶ Slang words for women are particularly derogatory, expressing disparagement through animal terms, such as chick, bird, and pet. In many all-male settings, such as athletic teams and military units, it is particularly insulting to be called a "girl" (meaning stupid, fearful, or silly). In professional settings, women are more likely to be referred to in gender terms, which diminish the authority and competence of the individual. For example, people rated a female political candidate as less competent, less serious, and less intelligent after reading a newspaper article in which she was referred to in various sexist terms such as "gal" and "lady candidate."⁴⁷

Language also maintains gender bias by making women invisible. So-called **generic masculine** language such as "man" instead of "human," "forefathers" instead of "ancestors," "his" instead of "his and her" helps communicate that males are the key people in society and women are bystanders. Research on the impact of such language clearly shows that these generic masculine terms are not gender-neutral. For example, when confronted with textbook titles such as "Social Man" or "Industrial Man," people picture males, not males and females.⁴⁸ In perception experiments using a tachistoscope (which projects an image for a very short time) subjects were more likely to report seeing a male's face if the language that accompanied the ambiguous image was generic masculine language.⁴⁹ And perhaps most importantly, male students are more likely to remember material when presented with generic masculine language than are females, who are more likely to remember it when presented in gender-neutral terms. In this way, so-called generic masculine language puts women at a disadvantage and continues a cultural bias favoring men.⁵⁰

Media Gender bias is promulgated by disparate images of men and women on television and radio, in movies, newspapers, and magazines. A

⁴⁶Matlin, M. W., *The Psychology of Women*, 2nd ed. (Fort Worth, TX: Harcourt Brace Jovanovich College Publishers, 1993), p. 240. I am indebted to Matlin for her cogent discussion of gender bias for much of the thinking and references in this section.

⁴⁷Dayhoff, S. A., "Sexist language and person perceptions: Evaluation of candidates from newspaper articles," *Sex Roles*, 9 (1983): 543-555.

⁴⁸Schneider, J. W., and Hacker, S. L., "Sex role imagery and use of the generic 'man' in introductory texts: A case in the sociology of sociology," *American Sociologist*, 8 (1973): 12-18.

⁴⁹Wilson, E., and Ng, S. H., "Sex bias in visual images evoked by generics: A New Zealand study," *Sex Roles*, 18 (1988): 159-168.

⁵⁰Crawford, M., and English, L., "Generic versus specific inclusion of women in language: Effects on recall," *Journal of Psycholinguistic Research*, 13 (1984): 373-381.

concise and well-documented discussion of this bias is described by psychologist Margaret Matlin who notes that men outnumber women by a margin of two-to-one in photos appearing in newspapers, as well as in television commercials, especially for commercials for expensive products. The authoritative voice that gives the last word to a product's appeal is a male voice in 9 of 10 cases. And men are more often shown in advertisements elevated above women who are more frequently shown lying or bending down, or draped in some horizontal position. In dramatic programs, women are seldom seen working outside the home and men are rarely shown doing housework. Research also shows that the people who hold stronger gender stereotypes also view more television.⁵¹

Lastly, media representations code gender bias through communicating more emphasis on the woman as sex object. In a study of 1750 photographs of people in magazines and newspapers, social psychologist Dane Archer and his colleagues showed that women's bodies are depicted much more often than men's, whose images are more likely to focus on the face.⁵² Other research shows that people infer more intelligence, competence, and ambition from photos of faces than from full body shots.⁵³ The use of scantily clad women to decorate cars, boats, and many other luxury items is a widely practiced, though probably unintentional, method of maintaining gender bias.

Scientific Research Did you notice the sex of the subjects used in Milgram and Zimbardo's studies? Or Newcomb's studies? For decades, nobody did. Generalizing from either all-male or all-female samples has made sex differences invisible. The field of medicine has recently recognized this problem; women's health issues have been given insufficient attention because of the automatic tendency to use male subjects and to think of males as the norm. Consequently, research on women's reproductive health has lagged behind research on most other areas.

In psychology, Carol Gilligan was one of the first to articulate the gender problem when she analyzed the work of Lawrence Kohlberg, who used boys to generate a theory of moral development. Gilligan criticized Kohlberg's theory as being male-bound, and argued that paying attention to gender gives a more accurate picture of moral reasoning because male and female morality are often different.

⁵¹Lull, J., Mulac, A., and Rosen, S. L., "Feminism as a predictor of mass media use," *Sex Roles* (9): 165-177.

⁵²Archer, D., Iritani, B., Kimes, D. D., and Barrios, M., "Face-ism: Five studies of sex differences in facial prominence," *Journal of Personality and Social Psychology*, 45 (1983): 725-735.

⁵³Schwarz, N., and Kurz, E., "What's in a picture? The impact of face-ism on trait attribution," *European Journal of Social Psychology*, 19 (1989): 311-316.

The moral imperative that emerges repeatedly in interviews with women is an injunction to care, a responsibility to discern and alleviate the "real and recognizable trouble" of this world. For men, the moral imperative appears rather as an injunction to respect the rights of others and thus to protect from interference the rights to life and self-fulfillment.⁵⁴

We will examine the implications of a feminine sense of morality later in the chapter, but my point now is that scientific research has contributed to gender bias by ignoring women. One reason given for studying men more often than women is that women's behavior is more variable, and in scientific research, variability is trouble. Researchers are looking for consistent and replicable results so they can build a coherent and elegant theory. But consistency cannot be the only rationale. When researchers wanted to study affiliation, they often chose women instead of men, as in the cases of both Newcomb's Bennington study, and the extensive research on affiliation by Stanley Schachter (a student of Festinger).⁵⁵ Scientists have used men to study aggression and women to study affiliation. In this way scientific research continues to code gender stereotypes and biases.

Gender stereotypes and biases may also shape the very conduct of science itself. For the most part science has been a male profession. Most people wrongly assume that science is a completely objective method, meaning that the subjective feelings of the experimenter are not allowed to enter the process. Although complete separation of the self from the subject matter is impossible, such objectivity would be valued by males, who especially appreciate separation in general. Consider "hard data" versus "soft data" as another expression of this unconscious gender dimension. This is not to say that females do not care about rigor (a gender, if not genital priority) but that women may be more likely to allow, appreciate, and express emotional connection with the subject matter than men. For example, Evelyn Fox Keller has shown how award-winning cell biologist Barbara McClintock's work demonstrates the power of connection, this "feeling for the organism"⁵⁶ to use the title of her biography of McClintock:

In McClintock's microscopic studies of *neurospora* chromosomes (so small that others had been unable to identify them), she found that the more she worked with the chromosomes, the "bigger and bigger" they got, until finally, "I wasn't outside, I was down there—I was part of the system." As "part of the system," even the internal parts of the chromosomes became visible. "I actu-

⁵⁴Gilligan, C., *In a Different Voice: Psychological Theory and Women's Development* (Cambridge, MA: Harvard University Press, 1982), p. 100.

⁵⁵Schachter, S., *The Psychology of Affiliation* (Stanford, CA: Stanford University Press, 1959).

⁵⁶Keller, E. F., *A Feeling for the Organism: The Life and Work of Barbara McClintock* (San Francisco: W.H. Freeman & Co., 1983).

ally felt as if I were down there and these were my friends." Much of this material suggests a kind of respect and attention—almost nurturant—that some people would see as the privilege of women.⁵⁷

In contrast to bondedness as the basis of inquiry, science is more often conducted from the basis of abstraction. The "warm and friendly" feelings for the subject matter exhibited by McClintock are much less common than "cold and removed" detachment, producing an emotional atmosphere which men would be more likely to appreciate and revere than women. In such settings "warm and friendly" are often discounted as "touchy-feely." This of course is not to say that men can't be warm and friendly. Instead, I am suggesting that social situations dominated by men are more likely to be formal and hierarchical, as in the military and the large corporation. And because gender bias pervades our society, women endorse these values almost as often as men do. In my own experience the most successful women in male-dominated settings are often the best examples of the male value structure (as they would need to be in order to succeed).

Gender Bias Saturates Our View of Nature

Contemporary forms of sexism should not be surprising, since our culture has inherited a strong legacy of gender bias from our greatest Western thinkers. Overtly sexist statements are easy to document among the great contributors to our Western worldview. For example, Aristotle claimed that "we should look upon women as a deformity, though one which occurs in the ordinary course of nature. . . . She is more envious, more querulous, more slanderous, and more contentious [than man]."⁵⁸ The Judeo-Christian tradition helped reinforce this sexism by describing woman as the second sex, made after man, and responsible for his undoing, as exemplified by the story of Adam and Eve. God made Adam in His image, and Adam would have been sinless, had it not been for Eve, the woman, who God created next. More easily tempted by sin, she is seen as less rational and less powerful than man, and therefore should rightly take her place under man's guidance, as directly urged in the New Testament:

For the man is not of the woman; but the woman of the man. . . . Let your women keep silence in the churches. . . . They are commanded to be under obedience. . . . And if they will learn anything, let them ask their husbands at home. (I Corinthians, 11-14).

⁵⁷Keller, E. F., "Women, science and popular mythology," in Rothschild, J. ed., *Machina ex Dea: Feminist Perspectives on Technology* (New York: Pergamon, 1983), p. 141.

⁵⁸Aristotle, *The Generation of Animals*, translated by A. L. Peck (Cambridge, MA: Harvard University Press, 1943). Cited by Matlin, *ibid.*, p. 236.

Thus, by seeing God as male, females are taught that their basic nature is flawed, sinful, and more distant from the all-perfect God than are males.

Saturated with Christian sentiment, the Enlightenment period carried on this view of women, as it crafted the rudiments of the scientific revolution. Recall Francis Bacon's words, which proposed that science should observe

not only . . . nature free and at large (when *she* is left to her own course and does *her* work *her* own way)—such as that of the heavenly bodies, meteors, earth and sea, minerals, plants, animals—but much more of nature under constraint and vexed; that is to say, when by art and the hand of man *she* is forced out of her natural state and squeezed and moulded . . . seeing that the nature of things betrays itself more readily under the vexations of art than in its natural freedom.⁵⁹ (emphasis added)

Thus, men should control and manipulate nature, which just like a female, should be squeezed and molded so as to behave properly under man's scientific inquiry. Assuming the dualism of male versus female, the Enlightenment thinkers projected it onto the distinction between human and nature. Scientific investigation became the explicit attempt by "man" to control and penetrate the secrets of nature (depicted as female). In this dualism, men are the users and controllers of nature, which, as an unruly and recalcitrant female, threatens men's control. A more misogynist formulation of our relationship to the natural world could hardly be imagined.

If this gendered understanding of nature seems dated, consider the contemporary manifestations of it in such terms such as Mother Earth and Gaia. Although these phrases are often used to express the need to respect and care for the planet, the terms are problematic to the extent that they continue our unconscious gender stereotypes. It would be far better to drop the gendered connotation altogether, since we are likely to misperceive environmental problems to the extent that we project our gender stereotypes on to them. For example, consider the words of an Exxon senior vice-president describing the aftermath of the *Valdez* accident:

Water in the [Prince William] Sound replaces itself every 20 days. The Sound flushes itself out every 20 days. Mother Nature cleans up and does *quite* a cleaning job.⁶⁰

The view that "Mom will pick up after us" is one which most men in the world can be expected to share because it is women, rather than men, who

do the vast majority of housework, cleaning, laundry, and tidying. The idea of Mother Earth is thus problematic, and likely to hinder our responsibility for solving our environmental problems. In geographer Joni Seager's words:

The earth is *not* our mother. There is no warm, nurturing, anthropomorphized earth that will take care of us if only we treat her nicely. The complex, emotion-laden, conflict-laden, quasi-sexualized, quasi-dependent mother relationship . . . is not an effective metaphor for environmental action. . . . It is not an effective political organizing tool: if the earth is really our mother, then we are children, and cannot be held fully accountable for our actions.⁶¹

Nowhere are environmental dramas played out in gendered terms more obviously than in the controversy concerning nuclear power. Nuclear technology was developed in the highly masculinized secret worlds of Los Alamos laboratory and Hanford production sites during the second world war. The language used by these scientists portrays the gender bias at work. For example, the atomic bomb itself was called by its designers a boy baby (if it was successfully detonated) and a girl baby (if it flopped).⁶² Men have had much more confidence in nuclear energy and its safety than have women since the atomic age began.⁶³ Moreover, many of the most long-standing and vocal environmental groups have been organized by women activists, worried about the health effects of nuclear wastes on their children and communities. The classic scenario, then, is a male-run establishment of scientific experts pitted against the amateur female activist. Women constitute the majority of virtually every environmental group around the world, and throughout the world, express more concern about environmental problems, more favor toward tougher environmental laws, and more distrust of experts.⁶⁴

Women are drawn into environmental disputes because as family caretakers, they are the first to notice the damaging effects of polluted water, food, and air on their family's health. Rachel Carson serves as an example

⁶¹Seager, *ibid.*, p. 219.

⁶²Cohn, C., "Sex and death in the rational world of defense intellectuals," *Signs: Journal of Women in Culture and Society*, 12 (4) (1987): 687-716.

⁶³Brody, C. J., "Sex differences in Support for Nuclear Power," *Social Forces*, 63 (1) (1984): 209-228. Louis Harris and Associates: The Virginia Slims American Women's Opinion Poll (New York: Louis Harris and Associates, 1972). See also two reports by Louis Harris and Associates: Harris 1975 Nuclear Power Survey #2515(MRDF) and 1976 #2628(MRDF). Both reports published by Louis Harris Data Center, Chapel Hill, NC. Also Nelkin, D., "Nuclear power as a feminist issue," *Environment*, 23 (1984): 14-20; 38-39.

⁶⁴Seager, *ibid.*, Chapter 6. See also Flynn, J., Slovic, P., and Mertz, C. K., "Gender, race and perception of environmental health risks," *Risk Analysis*, 14 (6) (1994): 1101-1108.

⁵⁹Bacon, F., "Preface of The Great Instauration," in Dick, H. G., ed., *Selected Writings of Francis Bacon* (New York: The Modern Library, 1955), p. 447.

⁶⁰Statement given by Charles Sitter in an interview on National Public Radio "All Things Considered," May 19, 1989. Quoted by Seager, J., *Earth Follies: Coming to Feminist Terms with the Global Environmental Crisis* (New York: Routledge, 1993), p. 221.

of the way in which women have catalyzed concern about environmental hazards: her internationally acclaimed book, *Silent Spring*, is widely known as the launching work of the ecology movement.⁶⁵ Grass-roots resistance to male-run environmentally destructive projects are legend throughout the world: in India, women have hugged trees to prevent logging; in Kenya, women have planted trees throughout the "Green Belt"; in Japan, women have demanded accurate labeling of dangerous chemicals; in New York, Lois Gibbs (who was often dismissed as "a hysterical housewife") organized a Clearinghouse for Hazardous Waste through her efforts to uncover the infamous Love Canal dump. Male scientific experts are quick to characterize the environmental movement as hysteria (a female problem, related to the word *hystero*, or uterus).

Why are women likely to express more environmental concern than men? One answer is suggested by environmental psychologist Paul Stern and colleagues, who found that women are more likely to see the connection between environmental conditions and harm to others. Stern's analysis draws on the work of Carol Gilligan, who, as discussed above, argued that women evaluate social dilemmas using an ethic of care. In Stern *et al.*'s words, because

women are more likely to see a world of inherent interconnections . . . [they] . . . are more accepting than men of messages that link environmental conditions to potential harm to themselves, others, and other species or the biosphere.⁶⁶

Similarly, at the meeting of the Global Assembly of Women for a Healthy Planet, Peggy Antrobus proposed that

We are different women, but women nonetheless. The analysis and the perspectives that we get from women are certainly mediated by, influenced very profoundly by, differences of class, and race, and age, and culture, and physical endowment, and geographic location. But my hope and my optimism lies in the commonalities that we all share as women—a consciousness that many of us have, if we allow ourselves to have it, of the exploitation of our time and labor in unremunerated housework, subsistence agriculture and voluntary work. Our commonality lies in the often conflicting demands of our multiple roles as caretakers, as workers, as community organizers. Our commonalities lie in our *primary responsibility for taking care of others*. Our commonality lies in our concern about relationships; the commonality that we share is the exploitation of our sexuality by men, by the media, and by the economy. The commonality that we share is in our vulnerability to violence. Our common-

⁶⁵Carson, R., *Silent Spring* (New York: Crest Books, Houghton-Mifflin Co., 1962).

⁶⁶Stern P. C., Dietz, T., and Kalof, L., "Value orientations, gender, and environmental concern, *Environment and Behavior*, 25 (1993): 322–348, p. 340.

ity finally lies in our otherness, in our alienation and exclusion from decision-making at all levels.⁶⁷ (emphasis added)

In these ways, then, we are unlikely to reverse our environmental destruction until we examine the ways in which gender bias helps drive that destruction. We will not make substantive changes while our institutions systematically exclude women, disempowering them to express and act on their experience, and ignoring their expertise and talents with regard to sustainable agriculture, medicine, and other life-supporting practices. The tendency to ignore and devalue females is a planetary psychological problem, and it will continue to impede our progress until we confront and neutralize our unconscious sexism. The knowledge, interests, and values of BOTH males and females are needed for environmental solutions.

Analogous to our unconscious sexism is our unconscious ethnocentrism. International development is destroying cultural diversity as fast as it is destroying biological diversity. Of the planet's 6000 cultures, between 4000 and 5000 of them are indigenous. Yet they are disappearing faster than at any other time in human history.⁶⁸ This loss of cultural diversity is dangerous because indigenous peoples possess vast ecological knowledge about their habitats. They have lived sustainably in them for long periods and can teach "developed" cultures much about conservation, biological diversity, and sustainable practices. Just as women need to be included in planning for sustainability, so too do indigenous people. Development should be a two-way, rather than a one-way, process in which skills are mutually taught and respected. Psychology as well as Western culture needs the wisdom of sustainable cultures.

This point is well argued by Helena Norberg-Hodge in her widely read book *Ancient Futures: Learning from Ladakh*. Ladakh is an isolated region of northern Pakistan that has recently entered into the transition toward "industrial monoculture," to use her words.⁶⁹ As a traditional Tibetan Buddhist culture, Ladakh has sustained itself for centuries in a harsh climate and with minimal technology. Yet its people are joyful, industrious, and happy. Norberg-Hodge urges us to learn the sustainable practices and values that this culture is quickly losing as global market mechanisms invade its traditional society. For reasons I will describe shortly, such mutual learning is becoming increasingly more unlikely.

⁶⁷Antrobus, P., at the Global Assembly of Women for a Healthy Planet, Miami, quoted by Seager, *ibid.*, pp. 269–270.

⁶⁸Durning, A. T., *Guardians of the Land: Indigenous Peoples and the Health of the Earth*. (Worldwatch paper no. 112) (Washington DC: Worldwatch Institute, 1992).

⁶⁹Norberg-Hodge, H., *Ancient Futures: Learning from Ladakh* (San Francisco: Sierra Club Books, 1991), p. 3.

The Global Context of Environmentally Destructive Behavior

I have spent some time on the problem of gender bias because it demonstrates the link between social psychology, which examines the interpersonal realm, and the larger political and cultural structures that drive environmental destruction. To give you a more concrete example of how gender bias and global environmental destruction are linked, let me describe some experiences my husband and I had while traveling in Thailand.

We arrived in Bangkok for some rest after roughing it on treks in the Himalayas. Thai Airlines offered a package deal from Kathmandu, Nepal which included a reduced rate at a modern hotel, so we booked it and eagerly looked forward to reliable hot water, a clean room, and safe food. When we checked into our hotel, we were a bit disappointed to find that it was an ultramodern Western hotel, filled with Western tourists and businessmen, but we were happy to discover that it had a health club. After suffering sore backs and joints from our treks, a sauna sounded wonderful. The health club was also modern, with bare wooden walls and the usual workout machines. When signing in, we saw that we could get a massage for a small extra charge, and decided to splurge. So it was quite a surprise to both of us when our masseuses showed up with bangly jewelry and skimpy outfits. More startling still, my husband's offered to climb on top of him without telling his wife! Had we been more experienced travelers, we would have known that it is very difficult to get a massage anywhere in Bangkok (or anywhere else in Thailand) that does not offer some kind of sexual activity. (In case you are wondering, my husband politely refused.) Bangkok has become the world's capitol for the sex industry, and Thailand is well known for the way in which prostitution is mainstreamed into the daily consumer culture. I will interrupt my story here for a moment to explain why.

Whereas in the United States prostitution is run primarily by pimps and organized crime, in Thailand, commercial sex, though not technically legal, is widely available through registered "entertainment centers," which are well protected by the police. Close to 10 percent of women between the ages of 15 and 24 work in "special services," and the vast majority of Thai men have their first sexual experience with a prostitute.⁷⁰ In Thai culture, the elite class has a long history of multiple wives and concubines; consequently the links between power, wealth, and multiple sexual partners is an ideal to which most of the male culture aspires.

But the sex industry in Thailand could not have developed to the extent that it has without international support. Thirty years ago, the United States helped create the sex trade's infrastructure for its foreign military personnel seeking "R and R." In 1967, the U.S. military signed a treaty with

the Thai government that allowed soldiers from Vietnam to visit Bangkok for "recreational services"⁷¹; between 1960 and 1972 \$4 million from the Bank of America Corporation, the Chase Manhattan Corporation, the International Finance Corporation, and the Deutsche-Bank was lent (through Thailand's Industrial Finance Corporation) to build massage parlors, hotels, brothels, and other types of "personal services" establishments.⁷² Since then, international tourism has explicitly advertised sexual services as a lure to visit Bangkok, as in the following examples:

Thailand is a world full of extremes and the possibilities are unlimited . . . especially when it comes to girls. . . . For the first time in history, you can book a trip to Thailand with erotic pleasures included in the price. (West Germany)

Slim, sunburnt and sweet, they love the white man in an erotic and devoted way. They are master of the art of making love by nature, an art that we Europeans do not know. (Life Travel, Switzerland)

You can get the feeling that taking a girl here is as easy as buying a package of cigarettes . . . little slaves who give real Thai warmth. (Kanita Kamha, Netherlands)

In Thailand, it is the market mechanism that rules, if there is a need somebody will emerge to satisfy this need. (Scan-Thai Travelers' Club, Norway)

The publicity about the famous massage parlours can only be tried out. (Vacances 2000, France)⁷³

With such rampant commercial sex, AIDS is a very big problem in Thailand, and experts estimate that by the year 2000, one third of all deaths in Thailand will be from AIDS.⁷⁴ I was especially dismayed to learn that many of the professional prostitutes are very young, often pre-adolescent girls, whose parents have indentured them in return for money to run their farms. Many of these young girls come from the hill villages in the north of Thailand, or Burma, where rural poverty is increasing so rapidly that families often face the choice of "selling" their daughters for a few years or losing their land and their ability to support the rest of their family.

To learn more about how the sex industry is fed by the rural poverty of the north, we traveled next to Chiang Mai, the biggest city in the north, to

⁷¹Truong, T.-D., *Sex, Money and Morality: Prostitution and Tourism in South-east Asia* (London: Zed Books, 1990), p. 161

⁷²Phongpaichit, *ibid.*

⁷³Truong, *ibid.*, p. 178.

⁷⁴Robinson, L. S., "Touring Thailand's sex industry," *The Nation* (November 1, 1993): 492-497.

⁷⁰Phongpaichit, P., *From Peasant Girls to Bangkok Masseuses. Women, Work and Development*, no. 2 (Geneva: International Labour Office, 1982).

talk to Peace Corps workers who were helping girls in the sex industry by teaching them safe sex practices or offering literacy classes to help provide alternative employment. One evening a Peace Corps worker took me to the Chiang Mai night market, one of the most delightful experiences I had in Thailand. While accomplished dancers and musicians performed intricate Thai dances, we ate delicious Thai food from the many different stalls. Later we wandered through the market, where village women from the hill tribes sat in their native costumes, selling tribal artifacts. The women were asking very little for these colorful costumes, baskets, jewelry, bags, and other crafts. As I inspected the wares, I found an embroidered purse which I particularly liked for its complexity, design, and accomplished hand craftsmanship. I asked the price, learned that it cost the equivalent of \$4 U.S. and paid it immediately. I could have bargained to get the price lower, but I thought that whatever I could give to support an alternative to prostitution was a good donation. How wonderful, I thought, that I could help support these women, so that they could stay out of the sex business. And \$4 was so little for such a beautiful piece of work.

A moment later I noticed that the Peace Corps worker had a frown on his face. I asked him about it and he said that one should never pay the asking price, because it is always at least twice as much as the fair price. When tourists pay the asking price, they drive up the currency scale, so that the local people cannot afford to pay for the same commodity. Eventually inflation affects the currency value for other basics, so that peasants become poorer and poorer as tourists overpay. What I believed was a good deal for me, as well as possibly an act of generosity, was also a damaging act.

This experience illustrates three points I wish to make about the global relationship between gender bias and environmental deterioration: (1) they seem unconnected at first glance but they are linked, and they contribute to each other; (2) our consumer choices affect both, although we are rarely aware of their impacts; and (3) they both contribute to economic underdevelopment and poverty.

International Development and Underdevelopment

Unfortunately, as discussed in Chapter 1, many international development programs designed to alleviate poverty have actually increased it by displacing subsistence-based communities from their land. In geographer Joni Seager's words,

The current economic development strategy for the Third World consists mostly of bringing Third World countries into the orbit of international trade by influencing them to eliminate subsistence agriculture and artisan modes of production catering to a local market, and to replace them with capital-inten-

sive plantations and factories geared to the international market. Thus, rich-government-to-poor-government aid typically emphasizes large capital-intensive projects, large construction and infrastructure projects, such as dams and other power structures, and agricultural transformations encouraging export-oriented crop production. This model of growth, when exported to poor countries, has widely contributed to rapid exploitation of natural resources and, by increasing the gap between rich and poor within Third World countries, it has escalated poverty, which itself, in turn, has put unsustainable pressures on the environment.⁷⁵

When people are desperate, they are forced to ravage their environments for immediate survival, and so devastation of many Third World resources escalates under international development programs. Such deterioration is often masked, however, by how economic development is measured: the gross national product (GNP) does increase, but it does so because a small proportion of the nation's elite are advantaged as their wealth grows; concomitantly, however, poverty is usually also increased among the nation's poor by driving peasants off their commonly owned land. Such deterioration of the peasantry has been called "underdevelopment" by many economic theorists.

Underdevelopment is easily observable in a country like Thailand, which prides itself on its status as an "NIC" (a newly industrialized country) in the international community. Thailand's economic progress in the past few decades appears very impressive, as long as one does not look too far into the countryside. Computing national averages, Thailand comes in just behind the "Four Dragons" of Southeast Asia: Singapore, Taiwan, Hong Kong, and South Korea on just about all measures of industrialization: lowered birth and infant mortality rates, high literacy rates, and high gross domestic product. However, Thailand has achieved this progress by ignoring the plight of the rural peasant, investing in urban services such as communications and manufacturing, and using a desperate rural population to provide cheap labor and tragically, cheap sexual services. Thailand has notoriously ignored its rural poor, failing to provide education, health, or agricultural assistance, but instead leaving them to starve as land taxes escalate and deforestation accelerates.⁷⁶ A farmer does not sell his daughter because of personal pathology, but instead out of an economic desperation that devastates not only the child prostitute, but also the countryside, through illegal logging, soil erosion, slash and burn agriculture, changing weather patterns, and falling crop yields.⁷⁷

⁷⁵Seager, *ibid.*, p. 133.

⁷⁶Phongpaichit, *ibid.*, pp. 71-76.

⁷⁷Ekachai, S., *Behind the Smile: Voices of Thailand* (Bangkok: Thai Development Support Committee, 1991).

While 1 billion of the earth's 5.5 billion people live in unprecedented luxury, luxury that has been significantly increased in the past two decades of international development, another 1 billion live in destitution. Poverty is increasing at a much greater rate than is wealth through international development, as international debt, ecological destruction, and landlessness grows. As Worldwatch researcher Alan Durning points out:

For the poor of Africa, Latin America, and parts of Asia, the eighties were a time of cruel reversals, a period when the global economy seemed to conspire against them. On top of the runaway population growth and accelerating environmental decline that were already dragging down living standards across the Third World, prices for poor nations' exports plummeted, and international debt siphoned a growing share of their income into the hands of foreign financiers. . . . Forty three developing nations probably finished the decade poorer, in per capita terms than they started it. The 14 most devastated—including Zambia, Bolivia, and Nigeria have seen per capita income plunge as dramatically since their troubles began as the United States did during the Great Depression. Indeed, the term developing nation has become a cruel parody: many countries are not so much developing as they are disintegrating.⁷⁸

Development projects have hurt both peasant men and women, but they have hurt women more because of their traditional roles and responsibilities. Throughout the world, in both developed and developing nations, women are primarily responsible for child care, housework, food preparation, and family clothing. In rural subsistence economies, women are the main providers of fuel, food, and water, and they depend heavily on community-owned waterways, forests, grasslands, and croplands for accomplishing these chores. When development efforts convert community resources to privately owned farms, women must go farther and work harder to provide fuel, food, and water. As a result, resources are more quickly depleted because more people are forced to forage on smaller community spaces. In southern Zimbabwe, for example, forests were cut in order to install mines and mining towns to support a cash economy. This forced women to gather their fuel from leftover forests, and severe deforestation has resulted.⁷⁹

Because of their responsibilities for obtaining family necessities from communally owned resources, women have traditionally been more knowledgeable, experienced, and concerned about sustainable environmental practices than have men. To the extent that development efforts ignore and undermine women, they also ignore and undermine sustainability. In the words of Worldwatch researcher Jodi Jacobson:

Differences in the obligations and workloads of men and women within subsistence economies, and how these shape their economic interests, have profound implications for the environment. . . . Studies show that because of their responsibilities for securing food, fuel, and water—and the labor burdens imposed on them when the resources needed to produce these goods become scarce—women tend to have a greater interest in preserving and conserving croplands, forests and other natural resources for perpetual use, whereas men are more often concerned with converting these resources into cash. Development programs that vest control over natural resources solely within the hands of men, or profit-making enterprises in general, are in effect explicitly supporting short term consumption at the expense of long term sustainability.⁸⁰

Furthermore, contrary to conventional stereotypes, women are more often the breadwinners for their families than are men. This is especially true in Thailand where women in the commercial sector are quite well accepted (whether in the sex industry, running a noodle stand, sewing in a Nike factory, or harvesting rice for wages). In developing countries where women have been able to get work (always lower-paying than men's work), they contribute more of their cash income to the family than do men. For example, a recent Mexican study has shown that women contribute 75 percent of their earned income, whereas men contribute only 40 percent. Unfortunately, men who are often isolated from their families through urban migration to find jobs, are more likely to spend their wages on consumer products such as cigarettes, stereos, tennis shoes, etc., as well as alcohol, prostitution, and gambling. Consequently, in every country, the relative nutrition of children is more closely related to the mother's rather than the father's income.⁸¹

For these reasons, development that ignores women increases both environmental destruction and population pressures by increasing poverty. The gender bias of international development demonstrates the important role of psychology in what seem like non-psychological issues: economics, foreign policy, and agriculture. Although rarely articulated, development projects that ignore women stem from a stereotypic belief about men and women: the assumption that men are wage earners and women are dependents. This erroneous view of women as dependents translates into projects that focus on men and their access to jobs in spite of data that show that women are more often the wage earners.

In a gender-biased world, it is easy to think that what is good for males is good for everybody. The way in which women have been left out of international development also characterizes other male-driven institutions,

⁷⁸Durning, A. T., "Ending poverty," in Brown, L., ed., *State of the World, 1990* (New York: W. W. Norton and Co., 1990), p. 137.

⁷⁹Jacobson, *ibid.*

⁸⁰*ibid.*, p. 13.

⁸¹*ibid.*, p. 16.

such as the multinational corporation, the military, and the nation/state, with similar ecological effects. The fact of male-dominated public institutions would be innocuous if the assumption held that what is good for men is also good for women, as well as good for the environment. Unfortunately, as military institutions show, that assumption is rarely correct.

The Military

It should come as no surprise that military organizations are also entirely designed by, run by, and almost entirely composed of men. Throughout the world men are more likely to do the warring and fighting than women, and this gender difference has simply been institutionalized in modern military organizations.

Males are more violent than females, showing eight times the rate of violent crimes in every country in which records have been kept.⁸² Societies in which men hold the exclusive power in decision making are more violent than societies in which men and women share decision making. For example, Iran under Khomeini, Germany under Hitler, and Japan under the Samurais, show both violence and male dominance, especially as compared with more peaceful societies such as the Hopi and Zuni cultures of the American southwest, who have more gender equality.⁸³ Women collude with male-built military institutions and warfare by "bravely sacrificing" their sons and brothers. But women do not choose to go to war nearly as often as males do. It is only when women find their families and communities threatened that they become as militant as their male counterparts.⁸⁴

Militarization hurts the environment in several important ways. First, the preparation for war creates enormous pollution—not just nuclear wastes, but pollution of every conceivable sort from metal and chemical to other types of hazardous industrial wastes. In the United States the Pentagon is responsible for one third of the nation's toxic wastes, producing more pollution than the top five multinational chemical corporations combined.⁸⁵ Because military institutions operate under shrouds of secrecy, these pollution problems are barely understood by the public who suffer their effects and are increasingly asked to pay to clean them up. The Department of Defense has excused itself from environmental regulations

⁸²Myers, *ibid.*

⁸³Eisler, R., *The Chalice and the Blade: Our History, Our Future* (Cambridge, MA: Harper and Row, 1987).

⁸⁴Zur, O., and Morrison, A., "Gender and war: Reexamining attitudes," *American Journal of Orthopsychiatry*, 59 (4) (1989): 528–532.

⁸⁵Renner, M., "Assessing the military's war on the environment," in Brown, L., ed., *State of the World, 1991* (New York: W.W. Norton, 1991), pp. 132–154.

that no other business or government agency would be allowed to escape. Secondly, the conduct of war is environmentally devastating, and growing more so as increasingly sophisticated weapons are used. Aside from the horrific environmental effects of a nuclear bomb, severe damage occurs from conventional weapons, such as a typical bomb that blows away an average of a ton of topsoil. Increasingly, wars are fought with ecological weapons, such as the 25 million gallons of defoliants and environmental toxins dumped on Vietnam, the oil fires of Kuwait, and the "scorched earth" policies in Guatemala.

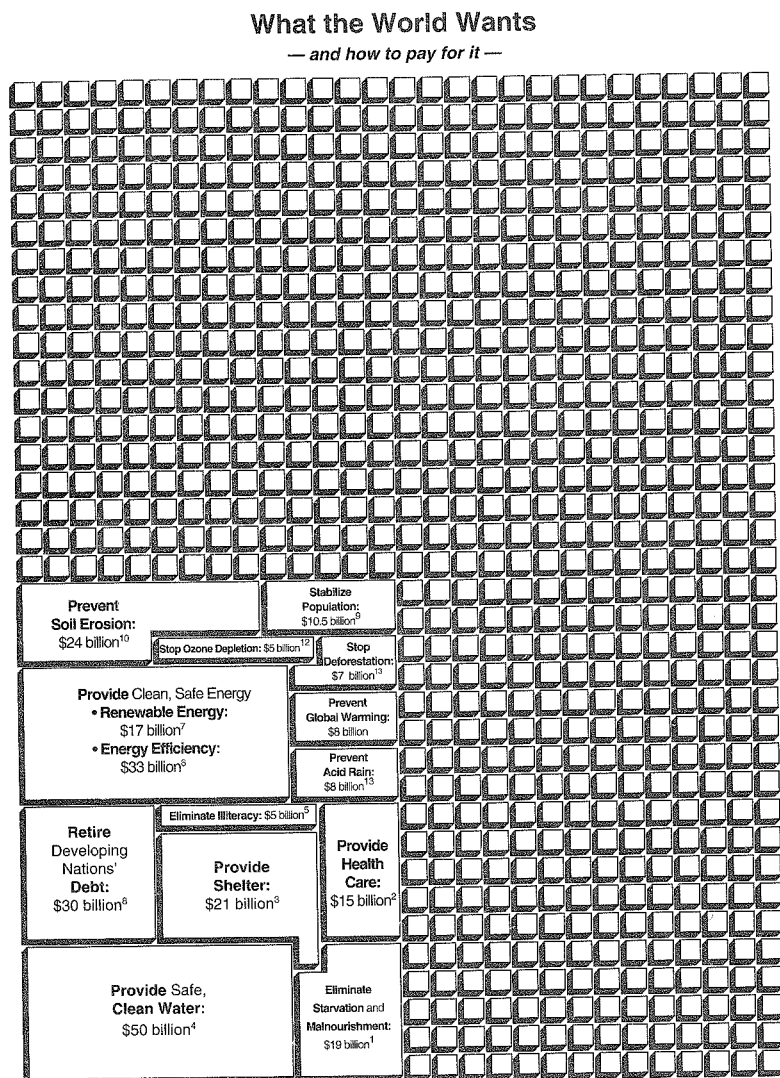
But most importantly, because of sheer monetary amounts, military expenditures rob nations from spending their resources for creating an environmentally sustainable world. "In terms of revenues . . . the military drain is enormous: \$15 to \$20 of every \$100 spent by central governments now goes to military purposes, triple their budgets for education, eight times their budgets for housing."⁸⁶ In the poorest countries, military expenditures are often the highest, contributing approximately 40 percent to the country's financial debt. That same money could go far in cleaning up environmental messes, rather than continuing to create them. Figure 3.3 shows the relative costs of solving the most pressing environmental and social problems compared to what the world spends on military institutions: about 1 to 4. In other words, reducing military expenditures by a mere one quarter would finance the solutions to pressing environmental difficulties.

What kind of world would pour so much money into militarization instead of the environmental and personal health of its population? My answer is a gendered world, in which men are more powerful, and in which both men and women assume that how men prioritize human activities is the best way to prioritize them. As the world's domestic caretakers, women would not choose to direct wealth toward military establishments, although they certainly collude with the male decision-makers who do.

To recap what has been discussed so far in this chapter, we have examined important dimensions of social influence and how they contribute to environmentally destructive behavior. Situational norms and roles lead us to implicit beliefs and behavioral choices that contribute to ecological destruction. Yet we have an enormous tendency to justify our actions and attribute them to self-enhancing explanations. We are influenced by others when their social status is high, but we tend to ignore or disparage messages from lower-status individuals. Prejudices and social stereotypes me-

⁸⁶Sivard, R., *World Military and Social Expenditures 1991* (Washington DC: World Priorities, 1991).

Figure 3.3 "The Enormous Costs of Global Militarization"



...using World Military Expenditures.

The above are annual costs of various global programs for solving the major human need and environmental problems facing humanity. Each program is the amount needed to accomplish the goal for all in need in the world. Their combined total cost is approximately 25% of the world's total annual military expenditures. Footnotes and references are [page 103]. Full explanatory text is in "Doing the Right Things," available from the World Game Institute at the address on the reverse.

- Total Chart = Total Annual = World Military Expenditures: \$1 trillion
- = One-tenth of One Percent of Annual World Military Expenditures: \$1 billion
- = Amount That Was Needed to Eradicate Smallpox From the World (Accomplished 1978): \$300 Million

© 1994 World Game Institute

While the world spends approximately \$1 trillion on militarization, human needs and environmental problems remain unsolved. Estimated annual costs of various global programs for solving these problems are shown. If approximately 25 percent of the world's total annual military expenditures were redirected to solve human and environmental problems, they could be alleviated.

What the World Wants

This chart seeks to make the point that what the world needs to solve the major systemic problems confronting humanity is both available and affordable. Clearly, to portray a problem as complex and large as, for example, the global food situation, with just a small part of a single graph is incomplete, at best. The following explanations of the chart's various components are not intended as complete or detailed plans, but rather as very broad brush-strokes intended to give the overall direction, scope and strategy. The paper, "Doing the Right Things" goes into more detail and is available from the World Game Institute at the address below. (References listed at end of numbered sections contain supporting documentation, further explication, and related information.)

- 1. Eliminate starvation and malnourishment:** \$19 billion per year total; \$2 billion per year for 10 years for global famine relief—spent on international grain reserve and emergency famine relief; \$10 billion per year for twenty years spent on farmer education through vastly expanded in-country extension services that teach/demonstrate sustainable agriculture, use of local fertilizer sources, pest and soil management techniques, post harvest preservation, and which provide clear market incentives for increased local production; \$7 billion per year for indigenous fertilizer development. Educational resources of #10 coupled with this strategy. Closely linked with #'s 2, 2A, 2B, 4, 5, 9, 10.
- 2. Provide health care:** \$15 billion per year spent on providing primary, health care through community health workers to all areas in the world that do not have access to health care. Closely linked with #'s 1, 3, 4, 5.
 - 2A. Child health care:** \$2.5 billion per year spent on: a) providing Vitamin A to children who lack it in their diet, thereby preventing blindness in 250,000 children/year; b) providing oral rehydration therapy for children with severe diarrhoea; and c) immunizing 1 billion children in developing world against measles, tuberculosis, diphtheria, whooping cough, polio and tetanus, thereby preventing the death of 6-7 million children/year.
 - 2B. Special health problems:** \$40 million per year for iodine addition to table salt to eliminate iodine deficiency, thereby reducing the 190 million who suffer from goiter and not adding to the 3 million who suffer from overt cretinism.
- 3. Eliminate inadequate housing and homelessness:** \$21 billion for ten years spent on making available materials, tools and techniques to people without adequate housing. Closely linked with #'s 1, 4, 5, 9.
- 4. Provide clean and abundant water:** \$50 billion per year for ten years spent on water and sanitation projects—wells, pipes, water purifying systems. Closely related to #'s 1, 2, 3, 9.
- 5. Eliminate illiteracy:** \$4.5 billion per year for ten years; \$2 billion spent on a system of 10 to 12 communication satellites and their launching; \$2 billion spent on ten million televisions, satellite dish receivers, and photovoltaic/battery units for power—all placed in village schools and other needed areas throughout high illiteracy areas; the rest (90% of funds), spent on culturally appropriate literacy programming and maintenance of system. Closely related to #'s 1, 2, 3, 4, 9, 10, 11.
- 6. Increase efficiency:** \$33 billion per year for ten years spent on increasing car fleet mileage to over 50 m.p.g., plus increasing

- appliance, industrial processes, and household energy and materials use efficiency to state of the art. Closely linked with #'s 7, 8, 12, 13, 14.
- 7. Increase renewable energy:** \$20 billion per year for ten years spent on tax and other incentives for installation of renewable energy devices, graduated ten year phase-out of subsidies to fossil and nuclear fuels, research and development into more advanced renewable energy harnessing devices. Closely linked with #'s 6, 8, 11, 12, 13, 14.
- 8. Debt management:** \$30 billion per year for ten years spent on retiring \$450 billion or more of current debt discounted to 50% face value. (Much of developing world's current debt is already discounted to 10-25% face value.) Not only helps developing countries get out of debt, but helps banks stay solvent. Closely linked with #'s 1, 6, 7, 10, 11, 14.
- 9. Stabilize population:** \$10.5 billion per year for ten years spent on making birth control universally available. Closely linked with #'s 1, 2, 3, 4, 5.
- 10. Reverse soil erosion:** \$24 billion per year for ten years spent on converting one-tenth of the world's most vulnerable cropland that is simultaneously most susceptible to erosion, the location of most severe erosion, and the land that is no longer able to sustain agriculture, to pasture or woodland; and conserving and regenerating topsoil on remaining lands through sustainable farming techniques. Both accomplished through a combination of government regulation and incentive programs that remove the most vulnerable lands from crop production; and by farmer education through vastly expanded in-country extension services that teach/demonstrate sustainable agriculture and soil management techniques. Closely linked to #1.
- 11. Reverse deforestation:** \$7 billion per year for ten years spent on reforesting 150 million hectares needed to sustain ecological, fuelwood, and wood products needs. Planted by local villagers, costs would be \$400 per hectare, including seedling costs. Additional costs for legislation, financial incentives, enforcement of rainforest protection. Closely linked with #10 and 14.
- 12. Reverse ozone depletion:** \$5 billion per year for twenty years spent on phasing in substitutes for CFCs, CFC taxes, incentives for further research and development. Closely linked with #14.
- 13. Stop acid rain:** \$8 billion per year for ten years spent on combination of tax incentive, government regulation and direct assistance programs that place pollution control devices (electrostatic precipitators, etc.) on all industrial users of coal, increase efficiency of industrial processes, transportation, and appliances. Closely linked to #6, 7, 11, 14.
- 14. Stop global warming:** \$8 billion per year for thirty years spent on reducing carbon dioxide, methane and CFC release into atmosphere through combination of international accords, carbon taxes, increases in energy efficiency in industry, transportation, and household, decreases in fossil fuel use, increases in renewable energy use and reforestation. Closely linked with #'s 6, 7, 11, 12, 13.

diate these effects. Gender bias undermines women and the values they hold. To the extent that we project feminine characteristics onto Nature and disparage messages from female environmentalists, we continue this pattern of ecological destruction.

Therefore, vigilant attention to the problem of gender bias will be important for reversing our global pattern of environmental destruction. Increased examination of women's roles, expertise, responsibilities, and concerns will be needed to interrupt the widespread practice of dismissing women as trivial, economically dependent, or irrelevant to building a sustainable world. Projections of female characteristics onto nature or the planet should be resisted because they are unlikely to lead to responsible solutions by mature men and women working together for an ecologically healthy world. You can help reduce the effects of gender bias by helping to discontinue the mechanisms that maintain it, including use of generic masculine language, and terms that refer to nature as female or to women in sexist terms.

I have taken time to extend the social psychological analysis of environmental problems to the discussion of gender because it shows how what seem like inconsequential social psychological phenomena quickly link to political, economic, and cultural dimensions of our environmental difficulties. These larger structural features of our predicament are important to examine because until we do so, individual actions will be trivial. Each behavior we undertake is embedded in a huge global system of political and economic structures. Without understanding these global patterns, we will lack ways of prioritizing changes, we will be easily discouraged about how difficult it is to transcend situational norms and roles, and we will be likely to waste time on more trivial actions while ignoring more important ones.

Our environmental problems are myriad and their impacts interact; recall from Chapter 1, for example, the way in which deforestation increases erosion, water contamination, fish loss, air pollution, and quite possibly global warming. Similarly, we have repeatedly discussed the ways in which resource depletion is driven by the interacting effects of poverty, overpopulation, pollution, and land degradation. From this perspective we could start with almost any indicator, and if we could change it, we would make a viable beginning. However, I propose that in the industrialized West, we must examine the consumer culture as a pivotal source point for most other dangerous planetary problems. In the industrialized countries, an average person consumes 3 times as much fresh water, 10 times as much energy, 14 times as much paper, and 19 times as much aluminum as someone in a developing country.⁸⁷

⁸⁷Durning, A. T., *How Much Is Enough? The Consumer Society and the Future of the Earth* (New York: W.W. Norton, 1992).

THE SOCIAL PSYCHOLOGY OF OVERCONSUMPTION

Our voracious appetites are fed by the natural resources of the developing countries who typically export to us their raw materials in exchange for some of our manufactured ones. Our disproportional use and abuse of the planet's resources not only pollutes and depletes our own country, but fuels a global trade system that feeds us as other countries fall into debt and disintegration. Our consumer culture sponsors much of our own dangerous behavior as well as encourages the developing nations to abandon their cultural traditions and adopt ours. As Alan Durning asks in the title of his book analyzing overconsumption, we must also ask: *How Much Is Enough?*

I believe this is a crucial question, which each individual must examine on a continuous basis. Yet there is little reason to believe that very many people are asking it. Consumerism is spreading, in our country as well as throughout the world. For example, 44 percent of the students entering college in 1967 indicated they believed it was essential to be "very well off financially"; in 1990 74 percent said so. Meanwhile, the proportion who believed it essential to develop a meaningful philosophy of life fell from 83 percent to 43 percent. By 1986 "having lots of money" had become first priority among the country's high school seniors.⁸⁸ Undoubtedly, these numbers reflect the success of an intentionally designed consumer culture articulated just after the second world war. As the Chairman of President Eisenhower's Council of Economic Advisers said, the American economy's "ultimate purpose is to produce more consumer goods."⁸⁹ In today's culture, the most frequent and explicit messages we receive are sales pitches. Advertising, an enormously powerful form of applied social psychology, explicitly urges us to see ourselves deprived until a particular product is purchased, unfulfilled until a new gadget is owned, hungry until that next burger is consumed. And advertisers are especially likely to focus on the self-doubt and personal insecurities of women. As one chief executive put it 40 years ago, "it's our job to make women unhappy with what they have."⁹⁰ Total global advertising is a truly colossal enterprise, rising per capita from \$198 in 1950 to \$495 in 1990, and outdistancing total economic output over that same period.

THE SOCIAL PSYCHOLOGY OF HAPPINESS

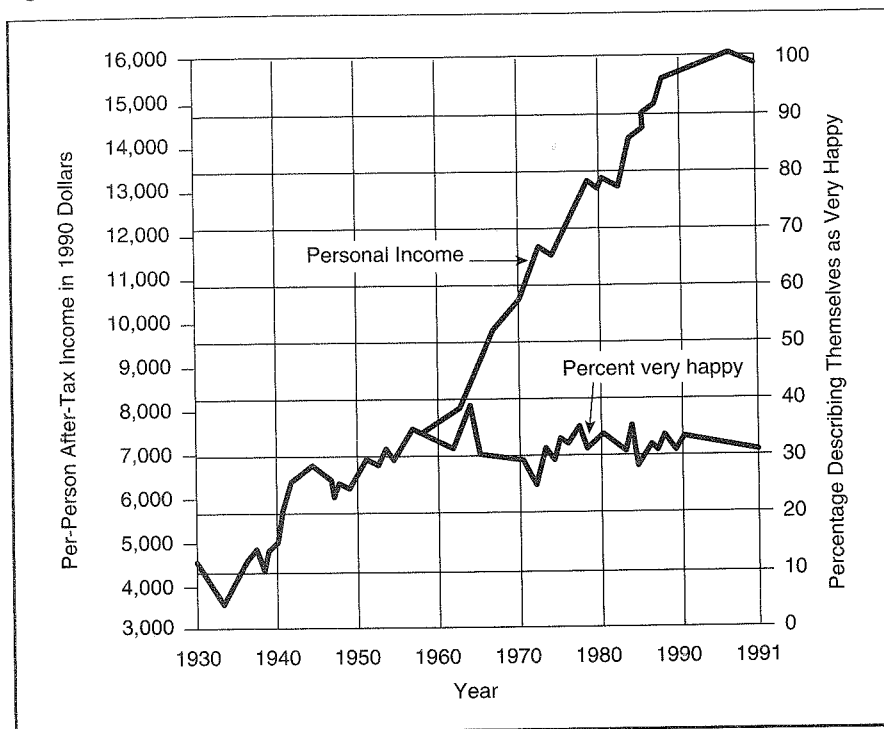
Unfortunately, increased consumption does not deliver the really important goods: research shows that people are not happier when they own

⁸⁸*ibid.*, p. 34.

⁸⁹*ibid.*, p. 3.

⁹⁰*ibid.*, pp. 119-120.

Figure 3.4 “Money Doesn’t Buy Happiness”



Because of rising incomes, more workers, and shrinking family size, buying power of Americans has doubled since the 1950s. However, self-reported happiness remains unchanged.

more things. Above a minimal poverty level, reports of personal happiness are completely unrelated to financial income or material possession. Since 1950, the purchasing power of Americans has doubled, yet their reports of personal happiness have remained essentially constant (Figure 3.4).

Instead, personal happiness is correlated with experiences that tend to become scarce in the mad rush to work harder and own more: good quality time with friends and family, meaningful work, and enough leisure time to relax and enjoy little things in life.⁹¹

Instead of contributing to our happiness, consumerism is more likely to detract from it because it reduces our potential for building personal happiness. Again, to quote Alan Durning,

The tragic irony is that while the consumer society has been stunningly effective in harming the environment, it has failed to provide us with a sense of ful-

fillment. Consumerism has hoodwinked us into gorging on material things because we suffer from social, psychological, and spiritual hungers. . . . Fulfillment . . . has to do with the timeless virtues of discipline, hope, allegiance to principle, and character. Consumption itself has little part in the playful camaraderie that inspires the young, the bonds of love and friendship that nourish adults, the golden memories that sustain the elderly. The very things that make life worth living, that give depth and bounty to human existence, are infinitely sustainable.⁹²

Empirical research on happiness supports Durning's claims. When asked "what makes you happy?" the vast majority of people mention, before anything else, satisfying close relationships with friends, family, and romantic partners.⁹³ Well-being also comes from active hobbies pursued during leisure time,⁹⁴ meaningful work,⁹⁵ and a sense of personal control over one's life and circumstances.⁹⁶ Moreover, in a study of college graduates, people with "yuppie values"—who preferred a high income and occupational success and prestige to having very close friends and a close marriage were twice as likely as their former classmates to describe themselves as 'fairly' or 'very' unhappy.⁹⁷ Thus, consumerism is threatening not only our environment, but also our psyches.

Switching from a consumer to a sustainable lifestyle will heal not only our environment, but also ourselves. In Chapter 8 I will say more about what a sustainable culture might look like and how the various subfields of psychology could contribute to it. For now, however, let us close by summarizing our ecological problem from a social psychological perspective.

From a social psychological perspective, environmentally relevant behavior is a function of a complex interaction of social influences. Norms and roles determine our choices by influencing what we think of as appropriate behavior in any given situation. When choices become more difficult, we try to reduce our dissonance by justifying our actions. We explain our own behavior by attributing it to various features of the situation, but we are more likely to attribute other people's behavior to their personalities. We imitate and are influenced by people whom we perceive to have higher social status, and even though we like to think that we are not sexist, we still

⁹²Durning, *ibid.*, back cover. Also "Asking how much is enough," in Brown, L., ed., *State of the World, 1991* (New York: W.W. Norton, 1991) p. 169.

⁹³Myers, D., *The Pursuit of Happiness: Who Is Happy and Why* (New York: William Morrow, 1992), p. 150.

⁹⁴*ibid.*, p. 137.

⁹⁵Argyle, *ibid.*

⁹⁶Langer, E., *Mindfulness* (Reading, MA: Addison-Wesley, 1989).

⁹⁷Myers, *ibid.*, pp. 149–150.

⁹¹Argyle, M. *The Psychology of Happiness* (New York: Methuen, 1987).

question would be socially awkward. Soon I was thinking about what a special treat this was, in an effort to reduce my cognitive dissonance about feeding my parents an environmentally destructive food. Ironically, they were busy applying similar dissonance reduction strategies, since my father recently had heart bypass surgery and knows that eating red meat is dangerous. (The risk of an American male having a heart attack is now 50 percent; the risk to a vegetarian American male is now 4 percent; in line with gender-biased research discussed above, no statistics on female risk were given.¹⁰¹)

Walking into any American supermarket presents us with norms that easily lead us to globally destructive choices. Food appears plentiful and cheap; plastic bags appear free; thoughtful placement and advertising of items makes it easy to select unneeded products; other people comb the aisles filling their baskets with environmentally destructive choices. Given such strong norms, social psychologists would predict that changing behavior would be difficult. Choosing to shop in alternative settings would be wise from a social psychological point of view. Food stores that offer items in bulk (enabling the consumer to reduce unnecessary packaging), farms that sell directly to customers (enabling the reduction of fossil fuels used to ship food all over the country), and stores that offer a good selection of healthful fresh foods instead of processed foods all provide situations in which good choices are easier to make.

Once we make small changes, other changes become easier. I remember switching over to a brand of nonpolluting household cleaners (sold widely under the name of Shaklee products). Realizing that these cleaners were cheaper and just as effective, I examined other household items, like fabric softener, which really seemed unnecessary as soon as I began using the organic products. In this way, the foot-in-the-door technique can facilitate a larger series of changes, once the initial changes are made. Asking our grocers about local and organic products, registering our desire for them and talking to our friends about having similar conversations, can



Source: Reprinted with permission of Chris Suddick.

¹⁰¹*ibid.*, p. 120.

start an attribution process that results in bigger changes than at first predicted. As we explain our actions to ourselves as environmentally responsible, and begin to see ourselves as global citizens, we become more conscious of other choices, and changes become easier and easier.

THE MAIN MESSAGE AND LIMIT OF SOCIAL PSYCHOLOGY

If there is any single message from social psychology, it is that our behavior is socially determined more than we like to think. Thus changes are much easier to make and keep if we put ourselves in social situations that support them. Our immediate reference groups of friends, relatives, and colleagues are enormously powerful social influence agents. Joining an environmental group, cultivating friendships around environmental concerns, and making public commitments to work on environmental problems are potent ways to heal the split between planet and self. As Kurt Lewin observed at the outset of social psychology,

It is easier to change individuals formed into a group than to change any of them separately. As long as group values are unchanged the individual will resist changes. . . . If the group standard itself is changed, the resistance which is due to the relation between the individual and the group is eliminated.¹⁰²

But social psychology is limited. Not all of our behavior is a product of group influence. If it were, everyone in any given situation or group would respond in exactly the same way. Instead, individual behavior is enormously variable. We can predict the actions of a group as a whole much better than we can predict the particular actions of its individual members. Resisting the group, experiencing conflict with its norms, and acting on the basis of more deeply seated personal dynamics also occur in our daily experience. While emphasizing the power of the situation, social psychology ignores individual differences between people. In its success to illuminate the principle that “people who do crazy things are not necessarily crazy” social psychology does not look at the internal (perhaps eternal) ways in which human beings respond to factors beyond the group.

Psychology must also examine the more internal features of the individual actor, the qualities that make each of us different and unique, and the ways in which we creatively express our own motivations that are in conflict with group needs. For those insights we now turn to the intriguing and troubling insights of Sigmund Freud.

¹⁰²Lewin, K., *Field Theory in Social Science* (New York: Harper and Bros., 1959), p. 228, as quoted by Schellenberg, J. A., *Masters of Social Psychology: Freud, Mead, Lewin, and Skinner* (New York: Oxford University Press, 1978), p. 79.