15

DEALING WITH DIFFERING ETHICAL SYSTEMS



"There are trivial truths and the great truths. The opposite of a trivial truth is plainly false. The opposite of a great truth is also true."

NIELS BOHR (1885–1962, NOBEL PRIZE—PHYSICS, 1922), CONTRIBUTION TO THE NEW YORK TIMES, OCTOBER 20, 1957

Even casual observation of how people act shows that many approaches to ethics exist. How do we choose among these approaches? Does it even matter what we choose? We will explore some aspects of these questions in the present chapter.

Differing Anthropologies

This book uses an anthropology, or model for the person, that sees the psyche as a unity of mind, emotions, and will. Other anthropologies exist as well, some having origins that are very ancient. Let's examine a few current anthropologies, and see what implications these have for ethical analysis.

Anthropologies based on modern psychology: A complete anthropology should account for the psychology of development, particularly as it affects moral behavior. Many theories exist to account for moral development. Choosing among them affects the question of moral responsibility. For example, at what point do children become fully responsible for their actions? If there is a progression of responsibility along which children move, what description should we use, and how can we make the progress go faster? A complete anthropology should also account for disorders like psychosis, depression, and compulsion. Once again, no single comprehensive theory accounts for all, but whatever view we take affects the question of moral responsibility. For example, at what point does addiction destroy the responsibility of adults for

their actions? If an employee suffers severely from addiction, our answer may determine whether that person is fired or merely required to seek professional help.

Anthropologies based on natural observation: Some anthropologies remain completely rooted at the level of what can be observed in the natural world. In this view (sometimes called positivism), people represent no more than the sum of their atoms and molecules, and disappear completely at death. Ethical behavior is then understood in terms of human pleasure, survival of the species, and the like. While avoiding problems with appeals to the supernatural, such an anthropology has problems justifying why people should do good in the face of unmerited suffering and uncertain rewards.

Anthropologies based on the supernatural: Some anthropologies appeal to things beyond the observable world. The most well known of these anthropologies originate in the world's long-standing religious traditions. Others include witchcraft and shamanism. All lay out in great detail the relation between humans and one or more supernatural beings, describe an immaterial dimension to human construction (e.g., a soul), and refer to a life after death. Looking beyond the observable world can fill in the gaps that plague anthropologies on the basis of nature alone. Unfortunately, differing supernatural anthropologies cannot be verified by systematic measurement, making difficult a choice among them and the moral systems they suggest. More serious problems arise when these anthropologies prescribe practices that harm human well-being—human sacrifice, for example.

Differing Principles and Methods

Separating principles from methods sometimes becomes a difficult task that we will not attempt here. Instead, we will summarize very briefly the highlights of major forms of ethical analysis.²

Egoism: Egoism represents more of a principle than a method of analysis. While egoism as a formal approach has found several defenders over the centuries,³ we mention it here mainly because so many people use it in practice. Basically, an ethical egoist promotes his or her own good. Actions are considered right if they bring about more benefits than harms for the self. Notice that not all egoistic behavior has to be selfish; sincere concern for the welfare of others can lead to great benefits for the self in some cases.

Utilitarianism: Utilitarianism represents both a principle and a method (actually, several methods).⁴ As a principle, utilitarianism appeals to the principle of utility: that actions should lead to consequences having the greatest total balance of benefits over harms. There are many utilitarian methods that vary according to how benefits and harms are defined and to whether the balance applies to individual acts or to rules that govern those acts.

Deontology (pronounced DEE-on-TOL-uh-jee): Instead of focusing on consequences the way egoism and utilitarianism do, deontology asserts that other features of an act determine whether it is right. Deontological theories focus heavily on the general rules that govern duty or obligation, and demand that those rules be obeyed under all circumstances. These rules may come from divine command, the state, or reasoned argument. Some forms of deontology (like "situational ethics") focus on what to do in individual cases, whereas others focus on general patterns of behavior to be followed in all cases.

Rights-based theories: Rights-based theories hold that people inherently possess certain rights, and that duties flow from the need to respect these rights.⁷ The U.S. Declaration of Independence uses this idea in its famous reference to the endowment of people with inalienable rights to life, liberty, and the pursuit of happiness. Rights-based ideas underlie the approach of many groups who work on behalf of, for example, political prisoners, or the poor. Problems crop up in defining rights, however—some people tend to elevate their personal preferences to the status of inherent rights.

Intuitionism: Some people hold that many important elements of morality cannot be justified on rational grounds. These elements can be sensed and known only by direct experience or intuition, as in the way we experience the scent of a flower or the feelings of love. Some moral writers have pointed to a difference in the way men and women (on average) approach moral problems, and have suggested that women commonly frame their solutions with more attention to personal relationships than with a dry appeal to rational principles. Some non-Western approaches to ethics do a similar thing. 9

Casuistry (pronounced CAZH-oo-is-tree): Casuistry represents more of a method of analysis than a principle. Casuistry assesses an action by comparing it with two other "paradigm" actions, one that is clearly right and one that is clearly wrong. For example, suppose we want to judge whether it is right to kill a puppy for food. Paradigm actions might include killing off a carrot patch

(right), and killing another person (wrong). Our decision depends on whether we classify the puppy as closer to a bunch of carrots or to a person. Casuistry's usefulness depends on whether we can come up with suitable paradigm actions. In our example, some might argue that carrots represent a poor paradigm when considering a puppy—some animal might be more appropriate. Of course, then we need to find a paradigm animal whose killing for food is clearly acceptable. Even with good paradigms, casuistry inevitably suffers from the problem of line-drawing. Casuistry casts every action as either right or wrong, with no allowance for degree. At the dividing line separating right from wrong, a tiny change in detail can shift the entire action over the border, counter to common sense.

Interestingly, among all the methods we have described here (other than virtue ethics), only intuitionism pays significant attention to interior morality. Egoism, utilitarianism, deontology, and rights-based ethics focus mainly on exterior actions, not intentions. Casuistry can incorporate intentions in principle, but in practice rarely finds use this way. The neglect of interior morality makes these approaches suspect. By accounting for interior morality, intuitionism at least in principle can serve as a useful basis for person-to-person morality. However, the vagueness of intuitionism makes it difficult to use as a tool for social policy, which requires concrete laws. Virtue ethics as described in this book seems to offer an advantage in this respect—the theory attends to interior morality while still offering a concrete framework for social policy.

Monism and Relativism

How should we handle all these different approaches to anthropology, principle, and method? Although they often conflict with each other, each seems to bring a perspective that contains an important germ of truth. Over the years people have responded in several ways to this problem.

Some have focused on similarities in the approaches, and argued that each perspective represents just one portion of a single, deeper ultimate reality. This view is roughly equivalent to monism—the belief that reality has only a single fundamental entity. Whatever truth this idea might hold, the tendency to gloss over real differences in practical moral rules remains a serious problem that can lead to a very superficial approach to ethical living. In situations where the various perspectives clash, the temptation to pick and choose expediently can become very strong, leading to a cafeteria-style form of ethics based on convenience.

Other people have argued that all approaches have equal validity. This view underlies relativism. It counts many defenders over the centuries, beginning with the Sophists of ancient Greece even before the time of Aristotle. Sometimes relativism arises out of a belief that humans can never learn what objective morality is, even if it exists in theory. Other times this view comes from a belief that truth represents no more than a culturally-conditioned phenomenon with no objective validity.

One major danger of relativism has been known since the time of the Sophists. When carried to extremes, relativism can be used to justify ruthless, uncontrolled self-interest. Indeed, the Sophist Thrasymachus proclaimed "injustice pays," and went on to say that the appearance of justice serves only as a veil to protect the interests of the strong. He put the idea this way: "the sound conclusion is that what is 'right' is the same everywhere: the interest of the stronger party." In other words, the practical consequence of a world where all forms of morality are created equal is that morality becomes enslaved by raw power.

Another major danger of relativism lies in its closeness to nihilism (pronounced NIGH-ul-izm or NEE-ul-izm)—the attitude that trying to be ethical makes no sense because there is no way to reconcile all the different approaches. In other words, the whole business of ethics becomes an exercise in futility. This attitude severely weakens the ability to commit to a serious ethical life. Indifference can follow as a logical consequence. Nihilism appears with enough frequency in modern society to make further examination worthwhile.

Postmodernism

Postmodernism represents a new mode of nihilistic thinking that has emerged on the cultural landscape over the past few decades. ^{12,13} Postmodernism does not speak directly to anthropology, principles, or methods in ethics, but includes a characteristic set of attitudes that has important implications for ethical behavior. Many writers still debate vigorously about exactly what postmodernism is. We will not argue the details here, but will note that our use of the term is looser and includes a less concretely defined social component than many formal philosophical treatments. In the view we take, core features of postmodernism include¹⁴:

- 1. a view of existence as lonely and impermanent, dominated by random happenings. Human feelings and efforts seem exhausted, and human values seem relative and arbitrary.
- 2. intellectual activity that refers to itself a lot, with big doses of absurdity, self-contradiction, and cynical satire. The bizarre and incoherent become commonplace.

a view that any kind of behavior is possible together with an attitude of coolness and detachment toward all things. Expressions of shock or surprise are suppressed and replaced with indifference or cynical laughter.

The postmodern view includes relativism as an important part. However, relativism by itself is normally an intellectual position that is accepted or rejected on the basis of rational thought. Postmodernism requires no such conscious choice. Just a little ordinary observation suggests that people can develop postmodern attitudes unconsciously through unpleasant life experience.

Postmodernism as we have described it poses dangers to the ethical life similar to those of relativism, but greatly sharpened by a sense of meaninglessness and hopelessness. These attitudes make sustained commitment to any form of morality very difficult. The rigors of everyday living pose major moral challenges even for the dedicated. Postmodern attitudes make these challenges worse.

True Pluralism

Our discussion argues that monism, relativism, and nihilism suffer from severe problems in the way they view the differing approaches to ethics. Yet ethical diversity remains an established fact that we must deal with. It probably makes sense to just accept this fact, but also to do our best to choose a good set of anthropology, principles, and methods. Having made this choice, we should try to adhere to it consistently, tweaking it and filling it out as experience suggests. Firm commitment in the face of difficulties plays a central role. Only after long consideration based on a pattern of failures should we consider giving up the core of whatever approach we have chosen in favor of another.

What about people who choose approaches differing from our own? How should they be handled? The analogy between ethical furniture making and moral living may prove helpful here. Both endeavors represent a craft. We have said before that several good ways may exist to build a cabinet, but some ways are better than others and some ways fail completely. Similarly, there may be several good approaches to carefully crafting a moral life. Experts in this craft do well to admire and learn from each other's actions, in the way that skilled furniture makers can admire and learn from each other's handiwork. There should be little question of trying to "convert" someone else from his or her basic point of view. Of course, just a little observation of our world shows that experts in the moral life are not very common. It makes sense for people who are not yet expert (but want to be) to find a master craftsperson and pay careful attention to what he or she does.

Conclusion

This chapter has offered no simple solutions to dealing with diversity in ethical approach. It has suggested that picking a particular approach and sticking to it offers the best hope for leading a consistently ethical life. The commitment requires the virtue of fortitude, while a periodic evaluation of how the approach is working requires prudence. Both efforts benefit greatly from the support of others, especially from those who clearly know what they are doing. When ethics is practiced as a craft—with avoidance of indifference, hopelessness, and sloppiness—pluralism does not have to be a bad thing.

A REAL-LIFE CASE: Geological Experiments in Sacred Mountains

Seismographic data from earthquakes offer considerable information about the Earth's interior. However, the random occurrence of earthquakes in space and time limits their usefulness for this purpose. Some geologists attempt to overcome this problem by planting regular arrays of explosive charges under the ground in suitable areas and monitoring the vibrations that result from the controlled blasts. Such an experiment was planned in the early 1990s for the region around the Valles volcanic caldera in the Jemez Mountains of New Mexico. The so-called Jemez Tomography Experiment (JTEX) was intended to better understand the motion of magma deep within the Earth's crust, thereby permitting better assessment of the hazards posed by large volcanoes. The experiment involved several university and government laboratories, but experimental details were organized mainly by Los Alamos National Laboratory because it was near the site. Approvals for the experiments were required from the Department of Energy (which was responsible for Los Alamos) and the U.S. Forest Service, which controlled much of the land in the Jemez Mountains.

Problems arose when the Native American Pueblos in the nearby area learned of the experiment and lodged a formal protest with Los Alamos. While no explosion occurred directly on Pueblo-owned land, the Pueblos pointed to the sacred nature of the Jemez Mountains in their religious beliefs. Setting off explosives within these mountains was seen as perturbing the balance of nature, leading to possible unanticipated consequences for humankind. The Pueblos insisted that JTEX infringed on their sacred sites and practices. Problems multiplied because almost all aspects of Pueblo religion are secret, so that no specifics were offered to back the claims or to allow for negotiating a modified experiment. Los Alamos representatives got the distinct impression that they were missing the point by speaking in terms

of specific sites or ceremonies—relatively Western concepts in this context. Given such limited information, the Forest Service decided to approve JTEX, reasoning that denial based on such vague claims would undermine the Service's ability to manage the nation's forests. However, wishing to avoid bad publicity on top of what it was already facing for handling the nations nuclear stockpile, the Department of Energy delayed its decision so long that Los Alamos decided to attempt a compromise.

After extended negotiations with the Pueblos, Los Alamos agreed to drop two high explosive blasts directly within the caldera, and replace them with vibreosis techniques. In vibreosis, a truck-mounted hydraulic apparatus vibrates the ground over a sweep of frequencies. The technique is more complicated than the setting off of explosives, and at the time its effectiveness for experiments like JTEX was unproven. Three of the four Pueblos in the region approved the compromise, and DOE likewise consented. The revised experiment took place successfully during the summer of 1993.

- ◆ Would you have approved the experiment as originally planned? Why or why not?
- In direct conflicts like this between scientific efforts and religious beliefs, which should take precedence if no compromise can be reached?

Reference

Baldridge, W. S., L. W. Braile, M. C. Fehler, and F. A. Moreno. "Science and Sociology Butt Heads in Tomography Experiment in Sacred Mountains." *EOS* 78 (1997):417–423.



"The uncommitted life isn't worth living."

MARSHALL W. FISHWICK (1923-)

Notes

- 1. For a good summary of these various developmental theories, see Daniel A. Helminiak, *Spiritual Development: An Interdisciplinary Study* (Chicago: Loyola University Press, 1987), ch. 3.
- 2. For a convenient but more detailed summary, see William Frankena, *Ethics*, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1973).
- 3. Famous writers who have defended ethical egoism include Epicurus (c. 342–270 B.C.), Thomas Hobbes (1588–1679), and Friedrich Nietzsche (1844–1900).

- 4. Famous historical utilitarians include Jeremy Bentham (1748–1832) and John Stuart Mill (1806–1873).
- 5. Famous deontologists include Socrates (c. 469-399 B.C.) and, with more precision, Immanuel Kant (1724-1804).
- 6. The Ten Commandments represent a good example of rules from divine command.
- 7. Originally put forth by John Locke (1632–1704), rights theories have become quite popular in the United States during the past few decades.
- 8. See Carol Gilligan, *In a Different Voice: Psychological Theory and Women's Development* (Cambridge, Mass.: Harvard University Press, 1982) for an excellent discussion of this gender difference.
- 9. For example, Hunter Havelin Adams in the *Portland Baseline Essay in Science* writes, "Nobody has a monopoly on truth. . . . There is no one correct way of knowing: there are ways of knowing. And Western conceptual methodology cannot discover any more basic truths to explain the mysteries of creation than can a symbolic/intuitive methodology." He continues, "For the ancient Egyptians, as well as contemporary Africans worldwide, there is no distinction between science and religion." (Quoted in Bernard Ortiz de Montellano, "Post-Modern Multiculturalism and Scientific Illiteracy," *APS News*, January 1998, 12). There is a group called the melanists who attribute a higher spirituality to people of color than to whites due to higher levels of melanin. The melanin supposedly has properties of superconductivity, high magnetic susceptibility, high absorption at all electromagnetic frequencies, and the capacity for information processing. Among other things, the melanin is claimed to offer greater potential for extrasensory abilities and deeper spirituality.
- 10. Indeed, the Sophist Protagoras (c. 480–c. 410 B.C.) took this agnostic view. Interestingly, he did not carry his relativism to the point of saying that every person should remain entirely free to act as he or she pleases. He argued that laws made by the state should be observed, not because they are the best possible, but because they are as good as can be made. See Samuel Enoch Stumpf, *Socrates to Sartre: A History of Philosophy*, 3rd ed. (New York: McGraw-Hill, 1982), 30–32.
- 11. Quoted in reference 10.
- 12. Specific examples of what some writers have classified as postmodern include films like Quentin Tarantino's *Pulp Fiction* and *Scream*, television programs like "Beavis and Butthead" and "Saturday Night Live," and rock music groups like Faith No More and Nine Inch Nails.
- 13. For a fascinating analysis of how the philosophical writings of even well-known physicists like Bohr, Born, Heisenberg, and Pauli have a closer relationship to postmodern criticisms of Western science than we might suppose, see Mara Beller, "The Sokal Hoax: At Whom Are We Laughing?" *Physics Today* (September, 1998):29–34.
- 14. This approach to postmodernism draws partly from Joseph F. Feeney, *America* 177 (November 15, 1997):12–16.

Problems

1. Write a page or two describing an ethical dilemma involving an ethical system different from yours that you have encountered in a job you've had. (If you've been lucky enough never to have been con-

fronted with a problem like this, describe one that a friend or relative of yours has had.) Recommend what action you think you (or your friend/relative) should have taken, and give reasons for and against that recommendation. Note: you don't have to say what was actually done in real life (unless you want to)!

- 2. Each case below has a question after it.
 - a. List the options/suboptions available to the main character who has to make a decision, together with the event tree flowing from each option.
 - b. Recommend what you think the character should do.

CASE 15.1 Dealing with Ethical Egoists

"What did you and Monica decide about painting that lunchroom at your factory?" Todd Cuibono asked his girlfriend Emily Laborvincet as they waited for the check at the Italian restaurant.

"She bit the bullet and decided to pay an outside contractor to get the old coat of leaded paint off," Emily responded. "And as accountant I had to be the one to figure out how to get the bill paid when we're stretched so thin financially."

Todd shook his head. "I still say she just should have had a couple of the factory workers do it. Sometimes I think she's not practical enough."

Emily rolled her eyes. "Yeah, I know. You're always so 'practical.' Anyway, how are things going at Pandarus Pizza? You haven't talked about it in a while."

"I expect they'll get better soon," Todd declared. Then he hushed his voice, glanced around apprehensively, and began to speak more earnestly. "Actually, Emily, I need to borrow something from you. You know that tape recorder you've got? The one with the attachment for recording telephone conversations? I need it for a few days."

"Whatever for?" Emily exclaimed quizzically. "What does that recorder have to do with Pandarus Pizza?"

"Shh!" Todd chided. "I've finally figured out how to get rid of the two people I hate most over there—my boss Thorne Mauvais and one of my subordinates, Celia Peccavi. With Thorne out of the way, I'll probably get his job! At least part-time, anyway. That restaurant doesn't need a full-time manager."

"What are you talking about?" Emily rasped incredulously.

"Well, lately Thorne and Celia have launched a total war on each other. They're at each other's throats all the time. Celia's been a snot toward him, and he's cut her hours to the bone. He's just looking for an excuse to fire her. Any way, each of them has accused the other of all sorts of things. Celia has accused Thorne of taking bribes from suppliers—a window painter I guess—and of permitting totally unsanitary practices in the restaurant. And Thorne has accused Celia of giving away free food when she's not supposed to. For both sides, I know some of this stuff is true, because I've seen it myself. But the rest of it I wasn't so sure about. Basically, they're at stalemate, because if one of them makes all these accusations to the owner, so will the other one, to retaliate."

"How does this involve you?" Emily persisted.

"Well, I decided to play like a mediator. In private I've tried to be really sympathetic to each of them. I've been doing it for about a month. Their hate is so strong that they're getting careless and letting their guard down. In fact, over the past week I basically got both of them to admit what the other has accused them of. In complete secrecy, of course. Now I just need to get it all on tape. If I can do that, I can give the tapes to the owner, and there's no question he'll just fire both of them!"

Emily stared in stunned silence for a moment. "I don't believe this!" she finally sputtered.

"What's not to believe?" Todd retorted with a hint of contempt. "They both deserve to be fired for what they did. And they're both jerks I can't stand. Plus I can get a better job by replacing Thorne. I can do the work a lot better than he can. No one's asking you to do anything. I just need your recorder. I mean, what's the world coming to if a guy can't borrow from his girlfriend?"

Emily just shook her head in disgust. "I don't know. It seems more and more that I just don't like the way you do things. It goes against my grain. Like the time there was that benzene spill where I work, and I had to decide whether to report it to the government. You told me not to, and I listened. But I never felt very good about it."

"It was good advice," Todd broke in. "Think of all the trouble you saved yourself and the company. And I do listen to your advice sometimes. Remember our lab partner Salina . . . how she didn't do anything on that big lab project, and we decided to write the final report ourselves without her? You insisted we complain to the professor, even though I thought it would do more harm than good. But we did it your way, even though we lost points in the process."

Emily scowled. "Yeah, about two—the way things turned out after she cut us a break on that crazy grading policy of hers. You were just taking the path of least resistance, Todd. You were willing to sacrifice a couple of points to keep me from bothering you about it. If the stakes had been higher, you would have fought me tooth and nail. About the recorder . . . I'll have to think about it."

◆ What should Emily do?

CASE 15.2 Working for a Company Whose Practices You Oppose

"Thanks again for watching the kids," said Dolores Sola wearily. "I get the shopping done faster when they're not around. Even just the two hours you give me every other Sunday helps a lot."

"No problem," replied Myra Weltschmerz as she put on her jacket. "They were good this time. Except when they were in the bathroom brushing their teeth. An argument started, and Garrett squeezed some toothpaste into Lorelei's hair."

Dolores rolled her eyes. "That's the second time this week! I can't get him to stop picking on his sister." Her voice hardened. "And it gets especially bad after they visit their father."

Myra nodded knowingly. "Uh-huh. I know. Remember, I came from a divorced family."

"He doesn't care to see them much," Dolores continued, "but sometimes they beg him and he gives in. Then he spends the whole weekend giving them candy and toys. There's no discipline at all. They tell him about all the times I don't give them what they want, and he eggs them on. Then the weekend ends, they come home, and I have to pick up the pieces. It's a nightmare!" Dolores paused, then added bitterly, "I want them to see their father, but sometimes it's more trouble than it's worth." Myra made a move toward the door. This nudged Dolores out of her sorrow for a moment. "Wait," she said hastily. "I'm sorry to dump this on you. Tell me about that interview you had last week. Was it good?"

Myra stopped and nodded. "Yeah. They offered me a plant trip!" Dolores's face lit up. "That's *great!*" she enthused. She gave Myra a hug. "When are you going?"

Myra's face fell. "I'm not sure if I am."

Dolores joy changed to shock. "W-why?"

"Well, I didn't know much about the company before I interviewed. It's a chemical company that makes all kinds of things. They said they wanted an environmental engineer, which I am. But after the interview I happened to see this big article about the company in one of the trade journals I read. Just by luck. The article said they have a long record of pollution violations, with lots of fines. And it hasn't been improving. They've got all sorts of legal trouble over it that could bankrupt them if they lose enough cases. And they sell stuff overseas that's banned in this country because of toxicity or something. I'm not so sure I want to work at a place like that."

"But I thought you said the job market was tough right now. Do you have other trips lined up?

Myra shook her head. "No. That's the hard thing. My interviews aren't always that good. I don't seem to have enough confidence. But I didn't go to college for four years to make stuff that kills people!"

"Yeah, but take it from me, Myra. Unemployment is no good. I know, 'cause I've been there. You're always worried about whether you can pay the rent."

Myra nodded. "I know, but you have children. I don't have them yet. And I want to do something I like, that I'm proud of, you know?"

"Well maybe you can," Dolores contended, "even with this company! You said they wanted an environmental engineer. Maybe they're trying to clean up their act. If you can help change them from the inside, that's something to be proud of!"

"I don't know, Dolores. The article I read was pretty damning. There were lots of facts and figures, and interviews with former employees. I'm not a superhero. Why should I lead the charge against all those problems? My life is hard enough as it is. There are other ways for me to be proud and happy." Myra paused. "I don't want to visit them if I'm sure I don't want to work there. I don't think it's fair to them. And I haven't traveled much before, especially alone. It makes me nervous. So a plant trip is a lot of stress for me."

Dolores gave Myra another hug. "Did you talk to your boyfriend about it? You know, Martin?"

Myra nodded. "Uh, huh. But he just told me to do what I think is best." Then she turned to leave. "I've got to go, Dolores."

◆ What should Myra do?

CASE 15.3 Research on Animals

Terence Nonliquet breathed a sigh of relief as he erased the black-board. He enjoyed his job as a teaching assistant in computer science at NTI, but he was glad the semester had finally ended with today's class. Only the final exam remained. When he finished, he banged the eraser down emphatically with a sense of relieved enthusiasm. However, his stomach sank when he turned around to see, not an empty classroom, but one final student to deal with—Celia Peccavi. Terence raised his eyebrows. "What do *you* want?"

Celia kept her distance. "Now that the semester is over, I just wanted to apologize for . . . well . . . you know . . . a couple of days ago."

"I can think of a lot of things you could apologize for," Terence retorted. "Like cheating and plagiarizing on your homework. Like repeatedly trying to extort me into a date with you. And like trying to drive a wedge between me and my girlfriend."

Celia reddened slightly with embarrassment. "Yeah, I pushed too hard. I'm sorry."

Terence eyed her suspiciously. "That's all you want?"

"Well, I have two other things. I wanted to thank you for nor-

malizing the grades between sections the way you did. You know . . . including the homework as well as the exams. I heard you and the other TA's secretly went against Professor Bligh's instructions. I got a C instead of a D because of it."

Terence frowned slightly. "It's not much of a secret if you know about it. I know you overheard me talking on the phone about the plan that one evening, but how did you find out what we eventually did?"

"I overheard one of the other TA's talking about it later," Celia answered. "Don't worry, I won't say anything. I just wanted to thank you."

"I did it because it was fair, not because it helped you. What was the other thing you wanted?"

"I know," Celia responded hastily. She paused, then ventured, "I wanted to ask your advice, too." Terence crossed his arms silently. "You know, I got fired from Pandarus Pizza," she continued.

"No, I didn't know," Terence replied without expression.

"It was a big mess, very unfair," she said sadly. She eyed him for signs of sympathy, but saw none. Her voice became more businesslike. "Anyway, I looked around, and got an offer from a different company to work over the summer. Actually, it's two offers since they're giving me a choice of two jobs. It's a firm that tests personal care products on animals. You know, shampoos, cosmetics, that sort of thing. They look mostly for skin irritation, using mainly rabbits. One of the jobs involves just entering the data some lab person takes into a computer, collating the results, doing some simple statistics, and that sort of thing. There's no direct contact with the animals, and the pay is pretty good. The other job involves actually helping with the experiments in the lab. I'd have to care for the animals, monitor what happens to them in the experiments, and sometimes even help with applying the test materials onto the skin. That job pays great—50 percent more, and I can really use the money.

"So why are you telling this to me?" Terence broke in somewhat impatiently.

"Well, I know you pretty well, and I respect your judgment. I'd like your advice on what to do."

"I've heard this from you before," responded Terence guardedly. "Last semester you wanted advice on how to handle some crazy situation at Pandarus Pizza. It was just an excuse to wriggle your way into my life."

"No it wasn't!" Celia protested. "I admit I sort of liked you, but I was doing badly in class and you asked me why. So I told you, and asked your advice. I really wanted to know." Terence frowned, and Celia continued in earnest. "Terence, I don't get along with my family well enough to ask them. I can't ask anyone I used to know at

Pandarus because I don't see them any more. And most of my friends aren't too mature. There aren't a lot of people I can ask. I swear I'm not trying to push you into anything."

Terence's expression softened slightly. "Well, I don't know. . . ."

"I mean, it's not like I wouldn't go out with you if you asked," she ventured tentatively, eyeing him closely. "I did hear you and Leah aren't together any more. But I definitely wouldn't try to force anything. I found out that doesn't work with you."

Terence stiffened at the reference to his former girlfriend. "Yeah, I suppose you must be happy. You were trying to get me away from Leah all along. But it wasn't just your antics that made us break up. There were all sorts of things. She and I finally agreed to just move on, that we weren't as compatible as we thought. I'm not looking for anyone else right now." He eyeballed Celia. "But even if I were, it wouldn't be you!"

Sensing defeat, Celia returned to her main objective. "OK, fine. I understand. But I still want to know what you think. I need the money to pay my tuition next fall. But putting slimy stuff on bunnies and watching them get a rash isn't my idea of fun. I'm not even sure if it's right. What do you think?"

Terence drew a deep breath, wishing for the conversation to end. "I don't know, Celia. Different people have different ideas on that. I can't make that decision for you." He gathered his papers and turned to leave. "If you don't mind, I've got a bunch of stuff to do this afternoon. I'm supposed to meet with Professor Bligh in ten minutes. Is there anything else?"

"No, that's OK," she responded quickly, and motioned for him to go.

• Which, if either, of the jobs should Celia take?

CASE 15.4 The Goals of Western Science

In response to a loud knock, Leah Nonlibet opened the door to the geology laboratory at NTI where she worked as an undergraduate research assistant. "Come on in, Brenda! Did you find the place OK?"

"Uh, huh," Brenda replied, looking intently around the lab. "It was nice of you to invite me here. We Poly Sci majors don't get much chance to see the inside of a research laboratory! So remind me. How long did you say you've been working here?"

"About a year and a half," responded Leah. "I mostly help the graduate students with their experiments and keep the lab drawers stocked, but this semester I've been doing some experiments on my own, too." Leah moved back toward the sink where she had been cleaning glassware. "If you don't mind, I just want to finish cleaning

this stuff. You're a little early. I'll give you the nickel tour in a minute when I'm done."

"No problem," agreed Brenda, eyeing what Leah was doing. "You invited me here partly because you're not totally happy with what you do here, right?"

"Yeah. It's like I was telling you last week. My boss, Professor Clark, wants me to work here again next year when I'm a senior. But I'm not sure I want to. I don't like some of what goes on around here, and I'm trying to decide what to do. I wanted advice from a different perspective. You and I have been friends now for a couple of years."

"Uh, huh," Brenda laughed. "Since freshman chemistry! And I can see right away one thing I don't like. You're doing the dishes! You kill yourself studying in all these classes, but what you get paid to do is dishes! How many women spend their whole lives doing dishes? Can't you do something else?"

"They have to get done, by me or someone else," replied Leah. "It's part of the job description, whether I hold the job or a man does."

"How can you be sure?" Brenda retorted suspiciously. "Lots of job descriptions are tailored around specific people. So anyway, remind me again about all the stuff you had to fight about this semester."

"Well, first Professor Clark and I were going to publish a paper in a journal, and he wanted to leave out some key details of a procedure we developed. He said his competitors would rush to do some obvious follow-up experiments that our work suggested, and would leave us in the dust because we don't have the resources they do. Withholding some of the details for a little while would help us stay competitive. Then he wanted to leave some data points I took off a graph we were going to publish because he said they didn't make sense. Finally, he was thinking about making me second author on a paper where I took most of the data, and I thought I should be first author."

Brenda shook her head in disbelief. "I can't believe you'd stay here another minute, let along think about working here next semester!"

"It's not quite as bad as I made it sound," protested Leah. "I guess reasonable people could disagree about the data points, at least. Maybe about the other things, too. I didn't tell you all the details just now."

"Still," contended Brenda, "it's so obvious. The whole effort here is about power, prestige, and money. It's the patriarchal power structure all over again. Clark and his henchmen don't worry so much about what they find as about how much power and recognition they'll get."

Leah thought for a moment. "I don't know, maybe there's something to what you say," she began slowly. "It's true that Professor Clark rejected a journal manuscript that came from a small, out-of-the-way country because he said the paper wouldn't be interesting to most of the readership—in the United States and Europe. The paper was about some data analysis method for use with a hand calculator. Most labs do the analysis on a PC, but this article was meant for people in places where PC's are rare and expensive."

"Obvious bias," Brenda rejoined.

"But it was more complicated than that. The paper wasn't written very well. Professor Clark understood exactly what value judgment he had to make." Leah paused, then continued, "I know it's an imperfect lab, but it's an imperfect world, too. And I like the science we do. We learn real truths about the way nature works. I helped find a new crystalline phase of a mineral, for example. It was really exciting!"

"What do you mean, 'truth'?" Brenda sniffed. "There is no truth outside of culture. It's all a conditioned thing. You can't understand any statement of 'truth' outside the culture in which it was said. For example, who cares about this new 'crystalline phase' aside from Clark and a bunch of other men. Do you think if Clark, his graduate students, and all other geologists were women that you would even be studying this? You'd be asking totally different questions. You'd be looking at how minerals could be used for world peace, or better child care, or stuff like that. If you work in this lab, all you're doing is letting yourself be used like a pawn in a maledominated power structure."

"Are you telling me I shouldn't work in any geology lab at all?" asked Leah incredulously.

"Maybe. If all they do is study things decided on by men. I don't know too many geologists who are women. I think your job is to protest, or at least not get contaminated by that kind of thinking."

Leah shook her head. "I like the subject. Even Professor Clark is pretty nice, although he and the other graduate students have faults. And while you look down your nose at money, I do need some. There aren't a lot of other labs in this department where I can go. They're not looking for undergrads like me right now."

"Well, I think you should quit. That's my advice," responded

◆ Should Leah continue to work in Professor Clark's laboratory?