CHAPTER 3

Self-Interest

All contradictions may be found in me. . . . I have nothing to say about myself absolutely, simply and solidly without confusion and without mixture.

-MONTAIGNE

A fundamental assumption of economics is that the dominant drive in individuals is a rational striving to maximize self-interest. This behavior is in essence a constant in all human nature: it is inherited in our genes and is a characteristic of the human biogram. "It makes possible the mathematical modeling of economic problems" (Samuelson 1947, 21). Theoretical structures, rigorously worked out and using this assumption as axiomatic, fill the economic journals and innumerable texts

Self-interest is defined in the Oxford English Dictionary as "Regard to, or pursuit of, one's own welfare esp. to the exclusion of regard for others." It is equivalent to selfishness; which is defined as "regard for one's own interest or happiness to the disregard of the well-being of others." Bluntly, as Robert Solow puts it, this canonical hypothesis is greed.

As long as self-interest is not adulterated with regard for others, it is not fuzzy, blurry, or unreliable and thus can be a firm basis for mathematical modeling. Many conventional economists hold the autistic position that it is heresy to hold that the major function of economics should be to explain human economic behavior and that this behavior may not be consistent with this rational maximizing assumption (Stiglitz 1983, 999). When pressed, some economic theorists may assert that of course they know that this assumption is an unrealistic, narrow view of human nature. It is only chosen for analytical convenience. The latter statement is obviously true. But does that justify erecting a theoretical structure or model on the assumption, forgetting to mention at the end that the model cannot be taken as a realistic guide to the actual world?

In fact, self-interest is not a simple concept. Analyzed, it turns out to be a second-order desire. We have desires for various commodities—food,

clothing, cars; and states of affairs—for good health, for respect. These are all primary desires. It is in our self-interest, for example, to eat when we are hungry. When you eat, you are satisfying your primary desire—to alleviate your hunger—so it is in your self-interest to satisfy a first-order desire, hunger for food. That is, self-interest is a second-order desire whose object is to satisfy a primary desire. Self-interest has as its goal the satisfaction of those first-order desires that affect us directly. And, as we shall see in the discussion, some first-order desires are for things quite distinct from one-self (Nagel 1995, 220–21)

As human beings in society and the economy, we are concerned with what people do and how they do it. It is not always necessary to know why people do what they do. The what and the how can be determined from observation, but the why is much more difficult or even impossible to ascertain.

William James drew a distinction between the *I* and the *Me*. The Me is the object of all of one's selfish concerns; the I is the ultimate thinker, which decides on actions. The I can make decisions directed toward benefiting the Me, or it can make decisions that will benefit others or even harm the Me. But this is counter to the economics assumption that every individual, that the I, always acts on the basis of self-interest—that it always acts to benefit the Me.

One of the great philosophical questions is whether or not human beings have free will. The economics assumption implies that humans do not. If in every circumstance the path of self-interest is always and inevitably chosen, then, you have no freedom of choice or free will. To have free will, you have to be able to choose. People are capable of forming and choosing among second-order desires. You can decide whether you want to choose the path of self-interest or some other course. Your *I* can decide what kind of person you want to be. In the words of William James, "A life is manly, stoical, moral, or philosophical, . . . in proportion as it is less swayed by paltry personal considerations and more by objective ends that call for energy, even though that energy bring personal loss and pain" (1902, 48).

Sometimes, as a last resort, the conventional assumption is defended on the basis that altruism, our choosing to help others, is in our self-interest. Thus, self-interest is stretched to contain its polar opposite, altruism. This is a classic logical fallacy, petitio principii (begging the question), that is, assuming what needs to be proved. Including opposites in one term, the concept is empty. One cannot include altruism in self-interest. In altruism, action is taken by the I and is directed not toward the Me but toward the Other.

Not all motivation is included in the span that ranges from complete self-interest through the varying mixtures of self-interest and altruism to complete altruism. There is another important dimension, selflessness. In Willa Cather's great phrase in My Antonia, "That is happiness; to be dissolved into something complete and great." A sure path to happiness is to lose oneself in a cause greater than oneself. One may escape from considerations of self-interest or altruism when one loses oneself in what one does—when one is completely immersed in advancing a cause, trying to master a body of knowledge, finding the answer to a formidable challenge, or creating. For many individuals, there is joy in absolute surrender to religious beliefs. In short, as John Stuart Mill wrote, "those only are happy who have their minds fixed on some object other than their own happiness." Emotion may overrun the cool calculation of self-interest. The lover may scorn prudential caution and the patriot forget his or her safety: "When the passion is extreme, suffering may actually be gloried in, provided it be for the ideal cause, death may lose its sting, the grave its victory" (James 1902, 87).

The behavior of every person is determined by the nexus of a large number of acting causes. No single cause rules the life of the individual. It is this evolving structure of multiple causal pathways that makes the complexities of the actions of a living creature so difficult to understand. People are concerned with establishing in their own minds who they are and how they wish to be seen and understood by others. An important part of personal identity is the public selfhood that is associated with the individual and has a profound influence on how he or she behaves.

When someone is asked who, or more precisely what, he or she is, the answer is as likely to be ethnic ("a Serb"), national ("an Australian"), supernational ("an African"), linguistic ("a Francophone"), or even racial ("a white"), or tribal ("a Navajo"), and all sorts of combinations of these ("a Luo-speaking Black Kenyan") as it is religious—"a Baptist," "a Sikh," "a Lubavitcher," "a Bahai'i," "a Mormon," "a Buddhist," or "a Rastafarian." (Geertz 1998, 9)

As human beings, we spend much of our lives trying to understand ourselves and each other. To understand the behavior of someone else, we use our experience, our feelings, and our reason as our imaginative resources. Our imagination helps us to try to make sense of another person's emotions and beliefs—which we ourselves may not share—so as to try to make the other person's conduct intelligible to us. We often make mistakes in this attempt to learn what makes another person tick. We also may be mistaken in our understanding of our own actions.

As we all know, people can be unaware of their true motives. Often we

do not know why we prefer one outcome to another. Research has demonstrated that a person may give a reason for an action when it was impossible that this verbalized reason was involved. The fact is that one likes to have a reason for what one does even when there is none. (Gazzaniga 1985). We have a strong inclination to justify our choices on some moral basis. In his negotiations, the great financier J. P. Morgan was guided by the conviction that there were two reasons for every action: a good one and the real one. The good reason is often the only one we acknowledge, even to ourselves. And, of course, sometimes the good reason is the real reason or there may be an admixture of both. Since the modern world has taken magic out of our lives, we have only science and our reason to guide us in obtaining what we want. But neither science nor reason can unquestionably tell us why we want it.

Modern formalist economic theory, however, bravely plunges forward and builds its intricate models on the assumption that it does know the motivation for human behavior. And, the why of human behavior is taken to be very simple. It is not complex, obscure, or self-contradictory, There is no ecstasy, no Dionysian music, no charismatic lightning flash of illumination. People do not alter their desires, change the motivations that drive them, or encounter a blinding light on the road to Damascus.

Most economic theorists do not even ask what self-interest is. It is part of the unconscious metaphysics that is taken for granted, and its usual interpretation is fairly narrow.

Economics has conventionally assumed that each individual has stable and coherent preferences, and that she rationally maximizes those preferences. Given a set of options and probabilistic beliefs, a person is assumed to maximize the expected value of a utility function, U(x). (Rabin 1998, 11)

Alchian and Allen state in plain words that man has an acquisitive drive or rationality that, although it may be instinctive, is a behavioral characteristic that exists whatever the economic system may be (1967, 20).

When Walras attempted to construct a theory of the economy that could mimic Newtonian physics, he confronted the problem of how there could be any regularity while the subjects, human beings, still were free to exercise autonomous choice. When humans are taken as we are, there is a richness of emotions, motives, expectations, and psychological uncertainties that affects all of us. There is a spectrum stretching from the noble to the nasty. C. S. Lewis found inside himself "a zoo of lusts, a bedlam of ambitions, a nursery of fears, a harem of fondled hatreds." Walras brushed all this aside and solved his problem by limiting human beings to a single drive, infinite selfishness. This—under the modern, more palatable guise of

rationally maximizing self-interest—is still the fundament on which neoclassical economic theory rests.

In the United States, most young, ambitious, academic economists do not perceive knowledge of the what and the how of the economy as being important for professional success. What is felt to be important, rather, is developing the ability to apply refined mathematical techniques of analysis in solving abstract problems of economic phenomena (Frey and Eichenberger 1992; Klamer and Colander 1990, 18). Consequently, this fundamental assumption, on which all the modern complex formal theoretical structures rest, goes unexamined and unchallenged by these theorists. However, as I shall try to show in this and the following chapters, the special interpretation given by last century's economic theory to this particular assumption of constant human behavior is both wrong and damaging to the economy and society.

In our everyday life, we cannot explain every human action by applying the principle of cui bono. We know that human beings have impulses that are not completely selfish. A person (the I) can act morally when it is counter to his or her own interests (to the Me).

Human beings are not monochromatic. As Rousseau perceived, man is both bourgeois and *citoyen*, selfish and altruistic, individualistic but with the need to be a member of a community. Cicero, in his *De Legibus*, noted that "Natura propensi sumus ad diligendos homines quod fundamentum juris est" (We have a natural propensity to love our fellow men, and that is the foundation of all law). Like Walt Whitman, we don't relish undeserved compliments: "O admirers, praise not me—compliment not me—you make me wince, / I see what you do not—I know what you do not." If self-interest were dominant, we would not blush at unmerited praise.

People often fight more bitterly for what they perceive as moral or religious principle than they do for mere self-interest (Wilson 1993). Human beings are motivated by what they believe and think and not only by their self-interest. Others wonder whether life has some higher meaning (many are convinced of it), whether one lives to serve a goal beyond that of satisfying ones's personal desires.

Let me reinforce doubts about the fundamental axiom by reminding the reader that advocates of this conventional self-regarding assumption seem compelled—in order to make it acceptable to themselves and the rest of us—to argue that the pursuit of selfish self-interest is really for the greater good of all. Let me raise another doubt by asking economist-readers whether they believe that the assumption is true of the motives of economists themselves. To coin a new term, does the assumption fully explain

meta-economics—the forces that explain the genesis of economic theories? Is the creation of economic theories driven only by the maximizing self-interest of the economist concerned? Does an economist work out a particular theory just because he or she believes, for example, that this will result in a lucrative appointment at a rich think tank, generous speaker's fees at businessmen's conferences, a well-endowed research center, or an endowed chair at a prestigious university? Surely, no one would believe that this is accurately descriptive of the full set of motivations of most members of the economic profession.

Economists who see the rest of the world as driven by self-interest indignantly repudiate such descriptions of their behavior. George Stigler, a leader of the market-idealizing Chicago school, reacted with the statement that economists

do not relish an explanation of their own scientific behavior in ordinary economic terms. To tell an economist that he chooses that type of work and that viewpoint which will maximize his income is, he will hotly say, a studied insult. Such market oriented behavior will be characterized not with our customary phrases such as consumer sovereignty, but in terms as harsh as "intellectual prostitution." To adapt one's view to one's audience is hardly to be distinguished from the falsification of evidence and other disreputable behavior. (1982, 60)

A most remarkable aspect of the fundamental assumption is that it lacks substantiation. There is no a priori guarantee that it is true or complete. In a branch of knowledge that scorns as anecdotal evidence any reference to an individual's experience, there is no body of research that validates the basic assumption on which the whole formal conventional structure rests. It has never been established empirically that individuals always act in a rational, calculating, self-interested manner. Nor has it been established that when an individual does show calculative rationality in pursuing self-interest this behavior derives from inherent human nature rather than acculturation. (There is also no empirical basis that establishes whether behavior that does not fit this pattern is due to culture, an inherent universal human trait, personal idiosyncrasy, or personality quirk.)

An economist relying on the fundamental assumption, if he or she reflects on it at all, must believe that it accurately describes his or her motivation and accurately exemplifies the innermost essence of all human beings throughout history and in all cultures. In short, relying on the fundamental assumption is relying on the quintessential anecdotal evidence. As we shall see, there is ample justification for shying away from this particular evidence.

Historical Background

This concept of a human being as one who pursues only self-interest—narrowly defined as fully or nearly synonymous with selfishness—without regard for religious salvation is in fact an ancient one in the Western world. But the ancient concept differs from the conventional economic notion in that self-interest was perceived as malign, not beneficent. In pagan thought, present selfishness was contrasted with the myth of behavior in a lost golden age. In Christianity, reinforced by Saint Augustine's teachings on Original Sin, human beings after the Fall are seen as selfish and sinful. Jansenism in the Catholic Church and Calvinism in the Protestant censured human nature as being in extreme subjection to material and selfish ends. Secular writers, like Hobbes and Mandeville, accepted this view of human nature for their own ends (Viner 1991, 69–72).

Hobbes, in his *Leviathan*, published in 1651, used the belief as an argument for absolute government. He agreed with conventional theory in identifying self-interest as a prime motivator of man, but for him this had malevolent rather than beneficent results. With men driven by narrow considerations of self (i.e., selfishness) and distrustful of everyone else, the result is "bellum omnium contra omnes," a war of everyone against everyone else. Consequently, a strong authoritarian government with coercive power is needed—as only such a government can keep men in line and make society possible ([1651] 1914).

While the central theme of Bernard Mandeville's *The Fable of the Bees* (1714) was "Private Vices, Publick Benefits," it meant something quite different from the modern belief in the beneficent results of the pursuit of self-interest. Mandeville believed that private vices could be made to produce public benefits only through the skillful management of the clever politician.

Hobbes's conclusions were unacceptable to many. Samuel Johnson remarked that the "natural flights of the human mind are not from pleasure to pleasure, but from hope to hope." More serious refuters of Hobbes, like Cumberland, Shaftesbury, and Hutcheson, argued that man is not completely selfish; that people have nonegoistic and cooperative instincts and drives that make society and government possible without the need for an iron hand to keep them in line. Shaftesbury agreed that every creature seeks his or her private good and interest but also has a sense of public good and welfare (Viner 1991, 59).

Butler argued that man naturally tries to secure the private and public good—and that both motives are under the control of his or her conscience. He made the telling point that self-love can be served in pursuing

the public good as well as the private. In addition to anticipating Adam Smith in noting that persons often serve the public good while pursuing their private ends, Butler warned—and this is directly relevant to the present discussion—against confusing possession of wealth or property with personal happiness. One can divert time or money from pursuing the accumulation of personal wealth to serving society. This may lead to greater personal happiness and is consequently in the self-interest of the individual (Myers 1983, 54–60).

It was also during this period that the modern notion began to be accepted that society is an aggregation of autonomous individuals, each of whom is endowed with rights against the claims of the group. The seventeenth- and eighteenth-century concept of natural rights and the theory of the social contract helped to liberate the individual from oppressive political systems. These ideas, by making the atomistic individual the basic unit of society, also provided a basis for liberal economics. (Pursued too far, however, the notion of the absolute priority of individual rights destroys social cohesion, civic values, and the responsibility of individuals to preserve a caring community.)

Adam Smith obviously did not agree with Hobbes that the pursuit of self-interest would necessarily have malevolent results. In *The Wealth of Nations*, he made his famous "invisible hand" remark—which is more often appealed to than understood—showing that under some circumstances self-interest has beneficial results:

As every individual . . . endeavors as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. (1776, 423)

It is clear when one reads the paragraph in which the invisible hand remark is embedded that Smith was trying to show that an individual directing his or her investment to secure the greatest return results in greater national revenue as well. In anticipation of the modern calculation of gross national product (GNP), however, he was not erecting the pursuit of private gain as

the only god and worship of it as the only way to secure social welfare. Note that he says that an individual pursuing his or her own interest *frequently*, i.e. not *invariably*, promotes that of society. Note also that in the last clause he recognizes that there are occasions when an individual intends to promote the interest of society rather than his or her own. In short, Smith did not subscribe to the notion that individuals always promote only their own interest and that this necessarily promotes the interests of society.

We know from Smith's empirical bent, as well as his remarks in other parts of the book, that he was also fully aware that pursuing private gain can be at the expense of public welfare. He notes: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices" (1776, 128). In another passage, he states that

merchants and manufacturers... being collected into towns, and accustomed to that exclusive corporation spirit which prevails in them, naturally endeavor to obtain against all their countrymen, the same exclusive privilege which they generally possess against the inhabitants of their respective towns. They accordingly seem to have been the original inventors of those restraints upon the importation of foreign goods, which secure to them the monopoly of the home-market. (429)

Perhaps Smith's most devastating comment is his warning to regard merchants and master manufacturers with suspicion. He describes them as "an order of men, whose interest is never exactly the same with that of the public, who have generally an interest to deceive and even to oppress the public, and who accordingly have, upon many occasions, both deceived and oppressed it" (250). He scarcely misses an opportunity to condemn the "mean rapacity . . . of merchants and manufacturers, who neither are, nor ought to be the rulers of mankind" (460).

Smith is often misunderstood. Joan Robinson stated that for him it was "only necessary for each individual to act egotistically for the good of all to be attained" (1964, 53, cited in 1999, 620). Gerard Debreu in his 1983 Nobel Prize lecture commented that

some of Walras' ideas had a long lineage that included Adam Smith's (1776) profound insight. Smith's idea that the many agents of an economy, making independent decisions do not create utter chaos but actually contribute to producing a social optimum, raises indeed a scientific question of central importance. (1984, 274–75)

For Adam Smith, it is clear that men pursuing self-interest do not uniquely and inevitably contribute to the public good. He also did not believe that man is completely dominated by self-interest; man is also controlled by conscience. The core of conscience is in our feelings for others and our reaction to their disapproval. Saint Paul's letter to the Philippians puts it succinctly: "Let each of you look not only to his own interests, but also to the interests of others." Keith Tribe summarizes Smith's concept of self-interest, as presented in his two major works, as follows:

The Smithian conception of self-interest is not an injunction to act egoistically and without moral scruple, safe in the knowledge that by doing so the public good would somehow or other result; it is embedded within a framework of social reciprocity that allows for the formation of moral judgment. Smith . . . proposed that not only do we have a desire to be approved of, and act accordingly, we also wish to be what is approved of in others (1999, 621–22)

One contemporary of Adam Smith, a true believer that an individual should pursue only his selfish self-interest, is not, however, cherished as a founder of modern economics. The Marquis de Sade stated as a law of nature in his *La Philosophie dans le boudoir* that an individual's duty is only to secure his or her greatest sensation of enjoyment. Pleasure as the measure of existence should therefore be the principle on which the state and its laws should be based. This means, he argued logically, that very few acts should be considered criminal. Why should those who have nothing respect the property of those who have everything? No one can claim exclusive rights over another person, so marriage is obsolete. Adultery and incest are positively useful. In following his own teachings, this self-centered monster, the marquis, earned one death sentence, twelve years in prison, and thirteen years in a lunatic asylum.

Evolution

Many economists, with little background in the natural sciences, still believe that the conventional economic assumption is consistent with the theory of evolution. It is mostly taken for granted that evolution sanctions the common economic assumption that competition and pursuit of individual self-interest are dominant natural drives. This view dates from a century ago. Then the scientific consensus was that nature was "red in tooth and claw," that competing species battled with one another and the fittest were the aggressors who survived.

Now the consensus is different. The tiniest and most fragile of organisms dominate the life of the earth: the chloroplasts inside the cells of plants and the mitochondria inside all of the nucleated cells in humans and other animals. The chloroplasts use solar energy to produce the food and supply the oxygen on which we all depend. The chloroplasts appear to be

the descendants of ancient algae that now live within the cells of higher plant forms.

The mitochondria in our cells as well as the cells of all other animals (with their own DNA separate from that of the cells in which they live) perform the vital function of turning oxygen into energy. These natural powerhouses descend from bacteria that began living within cells eons ago. Thus, evolution and cooperation go together. Cooperation among smaller units led to the emergence of more complex structures: first, cells with nuclei or mitochondria and then multicellular organisms.

This force for cooperation may even apply to more than animate life. Maja Mataric's experiments at the Brandeis University Interaction Laboratory found that when a group of ten to twenty autonomous robots are given tasks to do within a confined space they quickly learn courtesy and cooperation as social behavior (*Wired* 1995, 49).

As human beings, we consist of trillions of cooperating cells that live, do their job, and die so that we may function as conscious, thinking entities. If a pathogen infecting a human succeeds in penetrating a cell—thus protecting itself from the antibodies in the blood and lymph—the infected cell moves bits of protein from the intruder to its own surface. This draws the killer T-cells, and they kill the infected cell for the good of the whole. For artillerymen, it is reminiscent of the way a forward observer calls down salvos on his own position when the enemy is all around his foxhole. When a cell concentrates only on its own survival and reproduction, it has become a cancer, threatening the very existence of the human being. A cancer cell is a miniature neoclassical economic man.

Darwin perceived that success in survival was not solely dependent on competition. The success of many species, including human beings, is based on cooperation and altruism: "It must not be forgotten that although a high standard of morality gives but a slight or no advantage to each individual man and his children over the other men in his tribe, yet that an increase in the number of well-endowed men and an advancement of morality will certainly give an immense advantage of one tribe over another" (1952, 322).

Human beings succeeded in surviving and becoming dominant on earth through cooperation. The field studies of our relatives, the primates, conducted by post-Darwinian scholars have identified this characteristic as present in our evolutionary history (Ridley 1997). Recent research on social capital is showing that societies with high levels of trust and cooperation tend to have the most successful economies.

Cooperation is as essential for evolution as competition is in natural selection. Cooperation and competition are the twin forces that drove, and

drive, evolution from the first beginnings of life on this earth. Cooperation creates more complex structures, and competition among them through natural selection determines which ones will survive (Coveney and Highfield 1995, 232).

The history of corporations in modern capitalism imitates the evolutionary chronicle of life. As Darwin perceived, socially moral behavior among people is evolutionarily advantageous. Socially moral behavior is essential if people are to live together in society. It includes justice, honesty, and nonviolence. Human beings are sociable by nature and therefore inclined to socially moral behavior, but this must be reinforced by the culture in which they live. Societies in which nobody can be trusted and nobody cooperates cannot survive.

Children die when parents ignore their needs. Yet the rewards to parenting are too uncertain to justify the sacrifices in material goods, personal efforts, and emotional commitment that most parents make. Children were cared for even in societies such as those of the San (Bushmen) of southern Africa and the Inuit (Eskimos) in which old persons were abandoned when they became a net drain on the tribe. The young are also protected and nourished in other species of mammals even though when they become adults they will compete for a limited food supply. More selfish species vanish.

What Is Self-interest?

But what exactly is "self-interest"? Adam Smith did not restrict the meaning of *self-interest* to a rational desire for command over more goods and services. As we have seen, for him self-interest included much more. Smith, moreover, did not assume that everyone understands what his or her true interests are, stating that

though the interest of the labourer is strictly connected with that of the society, he is incapable either of comprehending that interest, or of understanding its connexion with his own. His condition . . . and his education and habits are commonly such as to render him unfit to judge even though he was fully informed. . . . Merchants and master manufacturers have a better knowledge of their own interest than the country gentleman has of his. (249–50; see also Viner 1991, 97)

Marshall, like Adam Smith, regarded economics as the study of men as they live and move and think in the ordinary business of life. He goes on to say that people in business, as elsewhere, are influenced by personal affections, their conceptions of duty, and their reverence for high ideals. The ablest inventors and organizers of improved methods and appliances are more stimulated by emulation than love of wealth. Whatever the motive driving individuals, economics is concerned with the material rewards that people derive from their activity in business life. He comments in passing that economics cannot be compared to the exact physical sciences, for it deals with the ever-changing and subtle forces of human nature ([1920] 1952, 12).

We are born into this world with particular aptitudes and inclinations, which provide the bedrock on which our values and characters are built with the aid of our families, education, and culture. We are socialized by our parents, schools, and society to internalize the cultural and ethical standards necessary for any society to exist. Human beings can as easily be other regarding as self-regarding. W. V. Quine states that we must recognize that altruism is an existing drive and that we should nurture it in the formative years in order to fan the sparks of fellow feeling into a perceptible flame (1987, 3–5).

Altruism, in fact, is one of the innate drives in primates like the apes, the monkeys, and ourselves. One of the early classics in primate studies relates how the males of a troop of baboons that was being preyed on by a leopard organized an ambush and killed the predator, with one of the male baboons dying in the battle (Marais 1947, 33–38). In a modern set of experiments, macaques were fed if they were willing to pull a chain and electrically shock an unrelated macaque whose pain could be seen through a one-way mirror. Otherwise, they starved. After perceiving the results of pulling the chain, the macaques usually refused to pull it again. One starved for nearly two weeks rather than torture another (Sagan and Druyan 1992).

Altruism is also shown by other species. Everyone who observes birds will have seen smaller ones "mobbing," that is, harassing and attacking a larger predatory bird. They do this sometimes at considerable risk to themselves—a great horned owl may kill one of the crows that are pecking at it.

Modern psychology agrees that individuals do and should pursue self-interest. But this is only a part of individual motivation. It is also crucial to realize that self-interest is not necessarily synonymous with selfishness. Selfishness is concentration on the individual, with no regard for others. The selfish person is interested only in himself, wants everything for himself, gets pleasure from taking, not giving. A selfish individual is lacking in self-love. To make up for this deficiency, a selfish individual tries to get gratification by acquiring material possessions or power.

Self-interest is not an end but a means. The pursuit of self-interest is a means to attain the end of personal happiness. It is through self-love that happiness, self-approval, contentment, and peace with oneself are attained

(Fromm 1947, 134). A person who is absorbed in his or her own desires is often mentally ill. To become whole, such an individual has to learn to relate to others. While an individual needs self-love to be mentally healthy, psychologists emphasize that this requires more than being driven by selfishness. This is fundamental in human biology. For example, "there is one central, universal aspect of human behavior, genetically set by our very nature, biologically governed driving us along. . . . [This is] the urge to be useful. This urge drives society along, sets our behavior as individuals and in groups (Thomas 1980, 21).

Human beings learned generations ago that living in a community was necessary and desirable. This is the theme evoked in John Winthrop's famous sermon, delivered before the Puritans landed in 1630 to found the Massachusetts Bay Colony: "We must delight in each other, make each other's conditions our own, rejoice together, mourn together, labor and suffer together; always having before our eyes our commission and community in the work, our community as members of the same body."

The symbols of religion generally relate to the community of persons, not individuals. People are persons in relation to one another. The Christian church sees itself as a body, divinely called, not as a collection of individuals. The Covenant of the Israelites was between God and a people, not with individuals.

A community is indispensable, but it is also creative. A community is more than the sum of its parts. In sport, it is well known that "A team of champions will lose to a championship team." After winning the 2000 World Series, Joe Torre, manager of the New York Yankees, commented: "We might not have had the best players but we certainly had the best team." Through group interaction, one is stimulated intellectually and becomes more creative. This is why universities were created and flourish and why a place like Silicon Valley is a continuous fountain of innovation. The focus of economic theory on the individual per se overlooks this fundamental aspect of human life and the economy.

Empirical research in psychology "makes clear that preferences depart from pure self-interest in non-trivial ways. Subjects contribute to public goods more than can be explained by pure self-interest; they often share money when they could readily grab it for themselves; and they often sacrifice money to retaliate against unfair treatment" (Rabin 1998, 17).

The aim of science is truth, that is, the best approximation of the truth that one can attain and from this to secure explanatory power. The drive behind science is the great desire that drove Goethe's Faust: "Dass ich erkenne, was die Welt / Im Innersten zusammenhält."

A substantial portion of research and invention is motivated by eco-

nomic considerations and is subject to the economic calculus. But the research activity of academic economists illustrates that the economic motive of pecuniary gain is not necessarily the dominant or controlling motive. The desire to win prestige and respect in the profession is certainly important. Intellectual curiosity, the challenge of solving problems, the desire to make a contribution to human society, and the competitive instinct to work out an answer before anyone else are all important, nonpecuniary motives. In advancing science and technology, these motives are at work. There is pleasure, and indeed fun, in making a new machine or improving a process. It satisfies the creative instinct, perhaps as much as creating a work of art. There is pleasure in speculating about a challenging problem, coming up with a possible solution, and seeing if it will work.

When Nobel Prize winner Walter Gilbert left his Harvard laboratory to help found and run Biogen, the international biotechnology company, he explained his motives as wanting to do something socially useful, wanting to create an industrial structure, and wanting to make money. A few years later, he returned to his laboratory because he found research more fascinating than business and, as one investment analyst complained, he had run the company more as a lab than a business and apparently regarded the company's capital as one big research grant (Shapiro 1992, 218).

A survey of American college freshmen in 1992 showed that two out of three said they wanted to lead a meaningful life, which they defined as doing good in addition to doing well (Murphy 1993, 6). To devote one's life to purely selfish ends brings nothing but misery. Many maladies (cardiovascular disease, stroke), accidents, suicides, and homicides are linked to loneliness, the breakdown of human bonding, and the loss of the sense of belonging to a community. Health and wholeness require one to be connected to other people in a community (David 1993, 32). It is agony, death-provoking desperation to feel that one has been forsaken, that no one cares.

To be happy, we must live for something more than selfish ends. This is a truth discovered and repeated across the centuries by the great thinkers and philosophers. Socrates idealized the good individual in the good society, and Plato and Aristotle emphasized the importance of human interrelationships. Buddha taught that men should give up their narrow personal goals and tormenting desires and devote themselves to altruism and self-renunciation. The ideal in the teachings of Confucius was the noble man in the noble state, and he exalted behavior that ensured harmonious social relationships.

Happiness does not come from numerous possessions, an enormous income, or great success. To be happy, one must have something to do that one knows is useful to others, someone to love, and something to hope for. The work that one does must provide something more than a monetary

reward—a sense of contribution, of pride in accomplishment, of joy in using one's special talents. Marshall commented that the verdict of experience is that true happiness depends on self-respect and self-respect comes only from endeavoring to live so as to promote the progress of the human race ([1920] 1952, n. 15).

William James in his *Varieties of Religious Experience* recalled that for people in all cultures religious rapture, moral enthusiasm, and cosmic emotion are all unifying states in which the sand and grit of selfhood incline to disappear. This is central in Christian theology, in which the individual is taught to submit to and find his or her center in a power or principle outside the self. Greed is strongly condemned. According to the teaching, "those who desire to be rich fall into temptation, into a snare, into many senseless and hurtful desires that plunge men into ruin and destruction. For the love of money is the root of all evils "(I Tm. 6:10).

In Buddhist or Hindu societies, a rich man pursuing unselfish self-interest may give up all his possessions and become a beggar. The Buddhist belief teaches reincarnation, which suggests that one does not have to achieve everything in this life—there will have more lives and more chances. It is still fairly common today, even in Christian cultures, for such a person to become a monk, priest, or minister.

In modern secular countries, people who are motivated by religion or humanism often devote their lives or a portion of them to serving society rather than their own economic interests. Andrew Carnegie believed that a man who dies rich dies disgraced. He lived up to his philosophy. After selling his steel company to J. P. Morgan for around \$500 million, he devoted his life to giving away his fortune, which was worth billions in today's dollars. In the few years before his death, he succeeded in giving away 90 percent of his wealth.

The warrior ethic in nonpredatory states is counter to the whole notion of selfish self-interest. Military officers are expected to place the interests of the nation and the welfare and safety of their subordinates above their own concerns. The classic military values are sacrifice, unity, self-discipline, and placing the interests of the military unit above those of the individual. To ensure that officers will live up to this ideal, military academies strive to inculcate honor and integrity—not the pursuit of selfish self-interest—into their hearts and souls. That this does result in high ethical behavior by most is indicated by the fact that the American public has consistently ranked the military at the top of American professions and institutions in terms of trust and confidence

Admiral James B. Stockdale survived eight years as prisoner of war in Vietnam. He credits the ability, shown by him and others, to resist torture without breaking to comradeship, pride, an enduring sense of self-worth,

and that mixture of conscience and egoism called personal honor. A man driven only by selfishness would have succumbed to the mixture of punishments and rewards offered by his captors.

On February 21, 1916, the German army on the Western Front began the great battle of Verdun, unleashing a hurricane of high-explosive shells on the French trenches. The High Command had decided to try to win World War I by putting the entire French army through an artillery-mincing machine. General Falkenhayn chose historic Verdun, where a salient cramped the defenders but which French pride would not allow them to abandon. The plan was to erase the defenders with a hail of shells and make only limited advances while attracting French reserves into the killing field until the entire French army had been pulverized. Before the battle ended in June, more than 600,000 soldiers had died on both sides.

During the course of the four months, French divisions went into battle, suffered tremendous casualties, were taken out for rest and replenishment, and were sent back in again. Soldiers who had been wounded and healed rejoined their units in the hell. Why? Why did the millions of soldiers on both sides involved in the trench warfare for more than four years continue to fight for so long? Why did soldiers obey when ordered, as in the British attack in Flanders in October 1917, to attack over ground so swampy that many wounded drowned where they fell? The best explanation is that given in Jules Romains' *Verdun:* Jerphanion, on leave from the battlefield, explains to a friend why he will return to the slaughter.

... c'est la contrainte sociale, tout simplement. La société veut, ... que les hommes souffrent et meurent sur le front. Alors ils souffrent et ils meurent. Voilà... la peur que l'homme a de la société est encore plus forte que la peur qu'il a des obus.

Leur peur de la société n'est pas physique. Elle est mystique. L'homme est ainsi fait que chez lui une peur physique est presque toujours moins forte qu'une peur mystique. . . . la peur mystique de la société sait prendre des formes qui elles-mêmes ont une action immédiate. D'un côté la peur de l'obus. Mais de l'autre la peur de ce que penseront tes camarades, ton chef, ou tes hommes, si tu es chef. Il faudrait en un sens plus de courage à un homme moyen pour affronter la réputation de lâcheté que pour affronter un éclat d'obus.² (Romains 1938, 223–24)

More

The fundamental axiom that self-interest is the dominant human motivation usually is accompanied by the corollary that self-interest is unlimited in its demands. Alchian and Allen, for example, plainly state in their text that "We . . . assume that man is greedy—meaning solely that he wants command over more rather than less goods" (1967, 20).

Mansfield in the earliest edition of his text (1970) says that the assumption is that consumers are rational, that is, they try to maximize their utility by getting on the highest possible indifference curve. But, he says, even the Rockefellers and Mellons cannot get to their highest indifference curve since this would mean spending more money than even they have (32) In the fourth edition (1982, 49), he merely states that we assume that the consumer always prefers more of a commodity to less. This fundamental axiom depends on the inarticulate assumption that the culture within which individuals act is consistent with the desire of individuals to maximize their wealth. This unvoiced assumption is not necessarily always true.

In brief, last century's economics did not question the commercial-hedonist values of contemporary American capitalism. These are less dominant in the communitarian capitalism of Western Europe, where the earlier values of service to the state, classical humanism, and Augustine's City of God are still strong. Similar exceptions can be made for Japan and the Confucian capitalism of Singapore, Taiwan, and South Korea. And for India, R. K. Narayan drew the contrast in this way: "America's emphasis is on material aquisitions and a limitless pursuit of prosperity. . . . The quality of life in India is different. . . . From childhood an Indian is brought up on the notion that austerity and a contented life is good" (*Economist* 2001b, 88)

In material hedonism, the formula for self becomes "I am what I possess" (or, as an American bumper sticker proclaims, "I live to shop"). What I possess includes all the things that can be measured in terms of money. The overriding objective of human endeavor is to maximize material comfort and enjoyment, and there is no end or satiety to this, for humans will always have new desires for goods. This present-day social myth is so dominant that most economists—and probably most modern people—find it hard to conceive that human nature can be different. This is, in short, a demonstration of the "fallacy of false fixity," the belief that a particular social behavior is part of the nature of things and cannot be other than what it is.

Actually, the desire for material goods beyond the basic necessities of food, clothing, and shelter has to be acquired or taught. Even the demand for clothing where the climate is warm is a learned cultural custom: In Karamoja, Uganda, as late as the 1960s a man considered himself socially proper in public without a stitch of clothing but would be ashamed to appear with an uncultivated hairdo. In the northern Gold Coast (present-day Ghana), local town ordinances were needed before women would don skirts to go to town.

African tradition discouraged accumulation of all kinds. It was only after years of contact with Indian, Lebanese, and Syrian traders, who penetrated into the back country with cotton cloth, pots and pans, steel hoes, and sewing machines, that new desires were created. Only then did African farmers begin to value the opportunity to produce in order to buy directly the commodities they had learned to desire (Oliver 1991, 196–97, 242).

But this was only the first stage in creating Acquisitive Man. European employers discovered that their workers were willing to work but only in order to buy the new commodities. Employers complained about target workers, those who were interested in earning a targeted amount and once they had it stopped working. If the piece rate was raised to encourage laborers to work harder and earn more, they would work less instead. They were interested in working just enough to pay for their strictly limited requirements. The workers needed money to pay the head tax, pay school fees for their children, or purchase the few commodities.³ This limited desire for goods was not unique to Africa; similar reactions were shown by other peoples as they came into contact with the material West.

King George III sent the first British ambassador to China with a cornucopia of British goods as gifts for the emperor in order to induce him to open China to British traders. The emperor was not swayed. It took military force in the Opium War of 1839–42 to secure a market in China for British merchants.

We now know a good deal from the direct testimony of the peasants themselves of what life was like in a small medieval community in the early years of the fourteenth century. This village, Montaillou, is near Carcassone in what is now southern France. A zealous bishop, Jacques Fornier, ran a rigorous Inquisition in his area and meticulously recorded the depositions of the people summoned. The testimony included detailed descriptions of their daily lives: what they did, conversations with others, relationships, beliefs, and so on. In this world of the 1300s, the peasants felt a deep repugnance toward "wealth." Ordinary Catholics, as well as the heretical Cathars, regarded wealth and the pleasures it bought as an inevitable source of sin:

"Come, Master Arnaud Teisseire," said a Pamiers jailer to the doctor of Lordat, dying in his cell and refusing to confess his sinful life, "you have wallowed in such opulence! And you have lived in such splendid fashion! And you have had so many temporal pleasures! How could you be without sin?" (Le Roy Ladurie 1978, 332)

People who were relatively rich were sometimes regarded as cowards for holding on to their possessions in this world instead of seeking salvation in the next.

The people of Montaillou were not unique. Contrast the modern successive generations of Rothschild bankers with the great Augusburg bankers, the House of Fugger, of the late Middle Ages. The House of Fugger came to an early end simply because no one in a succeeding generation was interested in acquiring wealth (Mumford 1973,168). The notion that wants are unlimited is strictly a cultural stereotype.

It is, of course, an economic truism that as one acquires more of any one commodity at some point its marginal utility will decline to zero. What economic theory finds harder to cope with is the idea that one can have enough of *everything*. The consumer is usually assumed to be like the woman tourist from the Midwest who, visiting Cape Cod and seeing the vast ocean, exclaimed, "This is the first time I've ever seen enough of anything!"

Many people, even in the present-day materialistic West, do not have unlimited desires. In the successful older high-income service economies, the conventional materialistic economic motive may be weakening. When income rises rapidly enough to enable one to make all the expenditures previously beyond one's reach, often one of the luxuries granted is to give up living on a budget. An individual stops trying to live like economic man in comparing one expenditure to another. What is budgeted now is not expenditures but time. One Texas oil billionaire, who could have lived in a style that a Roman emperor would have envied, lived very modestly, dressing like a blue-collar worker and driving a beat-up pickup truck. The only luxury in which he indulged was bigamy, supporting two wives and their families.

Once their basic physiological needs are satisfied, a growing number of people turn away from consumerism and the further accumulation of goods that needlessly complicate their lives and instead turn to a less stressful lifestyle. Herbert Stein, for example, wisely advised that the way to happiness is: "Keep high aspirations, moderate expectations, and small needs."

A poll in April 1986 found that only 14 percent of the people in the United Kingdom and 15 percent in the United States had as their main goal in life to get rich. The percentage in Japan, which has only recently acquired a high standard of living, was 38 percent. Most people in the United Kingdom and the United States wished to be able "To live as I like" (60 percent in the United Kingdom, 67 percent in the United States). In Japan, this figure was 43 percent. Another goal was to "help society, gain social position" (26 percent, United Kingdom; 18 percent, United States; 19 percent, Japan).

Many people decide to give their life purpose by going into low-paid social work or the ministry. Some become members of cults that provide

only the bare basics. While it may seem incomprehensible, there is satisfaction in asceticism, in denying desires. The theme that fulfillment or freedom lies in renunciation is so prevalent in religion that it must correspond to some deep, fundamental part of human nature. As early as 400 B.C.E. Antisthenes, the reputed founder of the Cynic school, was teaching that virtue, and the resulting happiness, was freedom from wants and desires.

We have lost the power even of imagining what the ancient idealization of poverty could have meant: the liberation from material attachments, the unbribed soul, the manlier indifference, the paying our way by what we are or do and not by what we have, . . . in short, the moral fighting shape. . . . the desire to gain wealth and the fear to lose it are our chief breeders of cowardice and propagators of corruption. There are thousands of conjunctures in which a wealth-bound man must be a slave, whilst a man for whom poverty has no terrors becomes a freeman. (James 1902, 333–34)

In Asia, two of the dominant religions. Buddhism and Hinduism, teach behavior that is directly opposed to that of economic man. Hinduism idealizes asceticism and preaches self-purification through the denial of desires. The spiritual objective for a Buddhist is to learn to live with the minimum amount of material goods. The ideal is a holy, contemplative life detached from toil and worry, desire, and disturbing passions of the heart. A person is liberated from evil by means of detachment from the world. The fullness of such detachment is nirvana, a state of perfect indifference with regard to the world and its material goods and emotions. In countries with a Buddhist culture, a successful businessman does not automatically enjoy the respectability, prestige, and self-satisfaction that he would have in the United States. It is not unusual for a highly successful entrepreneur in a Buddhist country like Thailand, for example, to give it all up at the summit of his career to become a monk.

The message of Saint Francis of Assisi six centuries ago was similar. He gave up wealth and luxury for a life of poverty. A somewhat related secular theme was expressed by Emily Dickinson (Shattuck 1996):

"Heaven" is what I cannot reach! The Apple on the Tree— Provided it do hopeless—hang— That—"Heaven" is—to Me!

The Color, on the Cruising Cloud— The Interdicted Land— Behind the Hill—the House behind— There—Paradise—is Found. Marcel Proust expressed a similar sentiment.

Nothing is more alien to me than to seek happiness in any immediate sensation, and even less in any material realization. A sensation, however disinterested it may be, a perfume, a shaft of light, if they are physically present, are too much in my power to make me happy. (letter to Princesse Bibesco)

The modern boy who said that he preferred programs on the radio to those on TV "because the pictures are better" and the romantic movement of the nineteenth century agreed: what is imagined surpasses the real. Keats sang: "Heard melodies are sweet, but those unheard / Are sweeter."

Conventional economics never spells out the full implications of the assumption that the desires of modern man are illimitable. What kind of society does this imply? The theory depicts people as being forever unsatisfied, driven by desires that will never be fulfilled. People are supposed to seek but not find, to achieve yet always lose. Ever striving toward unattainable and unsatisfying ends, with no rational limit to his or her desires, the individual must be oppressed by anxiety, insecurity, and loss of confidence. Such individuals, isolated and disordered, in endless competition with others who are driven by the same insatiable desires, would create an anarchy and not a coherent, livable society. Nietzsche maintained that such people are "last men," animals whose horizons are limited to securing their creature comforts.

There is no doubt but that unlimited demand for goods is a dominant drive in some people. But it is wrong to assume that unlimited desire is the dominant drive in *all* people. If there is anything inherent in human nature, it is rather the tendency to be indifferent to acquiring additional goods once one's basic physiological needs are met. This is demonstrated both by the behavior of "primitive" peoples before they are subjected to modern economic conditioning and by those persons who through religion, philosophy, or reason have immunized themselves from the prevalent hedonistic influences.

Conclusion

Human beings are motivated by what they think and believe, by how they have been socialized, and not blindly, inevitably, by selfish self-interest. For Smith and the classical liberals, the idea of self-interest correctly had a crucial moral component, stemming from human nature and the needs of society. This, unfortunately, has been overlooked by modern antiliberals

and market ideologues. Adam Smith was no eighteenth-century precursor of Gordon Gekko, pronouncing "Greed is good." We are social animals, and social virtues such as trustworthiness and a willingness to cooperate are essential to our well-being and a healthy economy and society. In our capitalist market economy, most of us have to make a living and hence have to pay attention to the economic motive. This is required by our economy and not necessarily by human nature. Yet the economic motive does not demand the single-minded and maximum selfish self-interest of theoretical economics. In making a living, one does not have to be greedy or insensitive to others, even though some people do go that far.

Useful and valuable results through empirical research can be secured by concentrating on the regularities of the *what* and *how* of human economic behavior. It is not necessary to assume complete selfishness to find reasonable consistency and regularity of behavior in particular situations. This requires focusing on material welfare results rather than unmeasurable psychological benefits. From these findings, as in other historical sciences, we can infer probable results solidly based on having studied the process in action. In this way, with a focus on material welfare and the real world, economics can become a true and relevant science. As usual, Marshall put the argument aptly when he noted that

the function of the science is to collect, arrange and analyse economic facts, and to apply the knowledge, gained by observation and experience, in determining what are likely to be the immediate and ultimate effects of various groups of causes; and . . . the Laws of Economics are statements of tendencies expressed in the indicative mood, and not ethical precepts in the imperative. ([1920] 1952, v)