The typical economic assumption is that people maximize the present discounted value of their consumption. I had a friend who took an MBA course at the University of Chicago, and the professor would begin every class with the question: “Why do we work?” And the class was expected to reply in unison: “To consume!” This was the key principle, that everything was about total consumption. Nonetheless, after certain basic needs for warmth, nourishment, and safety are met, what drives someone’s behavior? Is it calculating a maximized expected consumption path or maximizing relative performance or rank in the community?

A relative utility function would explain the absence of a general risk premium, Easterlin’s Paradox, and also why people prefer more to less, and are averse to idiosyncratic volatility. Yet it would be nice to get some independent evidence that it works in spite of passing the as-if test.

Economics’ essence is methodological individualism introduced by Adam Smith in *The Wealth of Nations*, to see what happens when we assume individuals act in their own self-interest is indeed the economic method. Usually, assuming that people are maximizing their income, or wealth, is sufficient when you are looking at parochial issues like rent control, or farmers responding to an influx of imports. Assume a relative-status utility function would generate similar implications as the standard economic assumption in most cases, because an extra dollar, unrelated to anyone else, is good in both an absolute and relative sense.

Adam Smith emphasized a self-interest that also recognized social position and regard for society as a whole, but this was well before anyone thought of writing down a utility function, taking a stand on precisely what self-interest means.¹ Indeed, this is one of the benefits of mathematical representation of theories, because it forces one to be clear. But if self interest is evolutionarily based, success for an individual is primarily relative, because
individuals compete more within their species for access to mates than with other species for access to resources, so to the extent one uses evolution to motivate a utility function, it would seem a relative utility function is appropriate.\textsuperscript{2} No matter how rich a society is, mates are like oceanfront property, a positional good in fixed supply.

In Charles Darwin’s \textit{The Descent of Man}, he noted that if humans had evolved as bees had, “there can be hardly a doubt that our unmarried females would, like the worker bees, think it a sacred duty to kill their brothers, and mothers would strive to kill their fertile daughters; and no one would think of interfering.”\textsuperscript{3} Bees are haploid/diploid, so from a gene perspective, such behavior is optimal in a Darwinian sense for their selfish genes (males are unfertilized eggs, getting all their genes from the female Queen, females descend from the male and female, but as males are haploid, their male genetic endowment is identical among sisters). The point is, what is highly endogenous cannot be considered \textit{all} bad, because to assume such instincts did not exist would imply many other things about current life would go away, too. As humans are just animals, natural selection has shaped not only our bodies but our very beliefs, our fundamental sense of right and wrong. This is sociobiology, and explains basic urges for the four F’s (feed, fight, flee, and mate).

Consider revenge, a motive that is ubiquitous, yet considered stupid, evil, and anachronism by many. Lions do not have this concept. So, following Darwinian logic, a new alpha male first kills all the cubs in his pride, causing all the females to go into estrus, where he can get busy creating his progeny. If lionesses held grudges against their children’s killer, male lions would not do this. Nature is what it is, but I’m glad people believe in revenge to some degree, because I imagine there would be a lot more violence otherwise (for example, “Gee, you killed my boyfriend, which was mean, but I guess I’m no longer busy Friday night, and I don’t hold grudges, so sure, I’ll go out with you”).

The key to understanding our unconscious motivation is to realize that its circuits were not designed to solve the day-to-day problems of a modern U.S. resident—they were designed to solve the day-to-day problems of our ancestors who lived without the benefits of regular productivity growth.\textsuperscript{4} In a zero-sum world that existed until 1750, and probably currently exists in much of the Third World, increases in per capita wealth through invention, investment, and extended economic exchange were rare. More for you was less for me. Therefore, if anyone managed to acquire a great deal more than anyone else suggested there was a stash of gains, acquired by cheating, stealing, raw force, or sheer luck. With the average income constant, wealth is merely about redistribution. Anyone with conspicuous wealth would be asking for a coalition of the less wealthy to expropriate it. If actions are
basically redistributive, it is hard to develop an instinct for thinking solely on one's own wealth, independent of others.

Neurologically, since humans are quintessentially social animals, much of the brain is given over to processing social information, including in-group status. Biologists Thomas Insel and Russell Fernald (2004) argue that because information about social status is essential for reproduction and survival, specialized neural mechanisms have evolved to process social information, making status orientation hardwired into our brains as a consequence of evolutionary selection (mates are the ultimate status good). Indeed, one set of such cells are mirror neurons, which solve the ancient philosophical problem of how we instinctively know other people are conscious, even though we cannot know that others’ consciousness is exactly like ours. When you see a woman grinning broadly, how do you know she is happy? Not through some abstract reasoning process that analyzes the visual information coming from her face and makes a logical inference that her expression is associated with happiness. Instead, you instantly activate mirror neurons in your brain that are active when you are happy. You may even make subtle, unconscious muscle movements to imitate her expression. They fire just as when you smile, making your recognition of her emotion effortless, requiring no logical calculations. The brain appears to reuse its complex machinery designed for taking action, feeling emotions, and perceiving objects for the purpose of understanding what other people are doing, feeling, and saying. The human mirror neuron system is now thought to be involved not only in the execution and observation of movement, but also in higher cognitive processes—being able to imitate and learn from others’ actions, or decode their intentions and empathize with their pain. Autistic children tend to be mind blind, that is, they have trouble seeing others as beings with intentionality and feelings, causing them to behave antisocially, and they have been found to have deficiencies in their mirror neurons. Without the hard wiring, understanding, even recognizing people, is very difficult, as artificial intelligence researchers have discovered.

The key is that recognizing other individuals, for healthy people, is hardwired, and makes us intrinsically socially conscious. Just as only animals with self-awareness, a higher-form consciousness, recognize themselves when they look into a mirror, seeing one’s self in others is a part of higher consciousness. “The self and the other are just two sides of the same coin. To understand myself, I must recognize myself in other people,” says Marco Iacoboni, a leading researcher in this field. Awareness of others is integral to our thoughts as awareness of our own feelings.

In a book titled Human Universals, published in 1991, professor of anthropology Donald Brown listed hundreds of human universals in an effort to emphasize the fundamental cognitive commonality between members of
the human species. Some of these human universals include incest avoidance, child care, pretend play, envy, and many more.⁹ A concern for relative status was a human universal, and relative status is a nice way of saying people have envy and desire power.

**FROM A JANUARY 22, 2008, NEW YORK TIMES ARTICLE TITLED “POLITICAL ANIMALS (YES, ANIMALS)”**

**Monkey Status**

Dario Maestripieri, a primatologist at the University of Chicago, has observed the social foibles of the rhesus monkey, a close relative to humans.

He notes that “throughout human history, you see that the worst problems for people almost always come from other people, and it’s the same for the monkeys. You can put them anywhere, but their main problem is always going to be other rhesus monkeys.”

“Individuals don’t fight for food, space or resources; they fight for power.” With power and status, he added, “they’ll have control over everything else.”

“Fighting is never something that occurs between two individuals. Others get involved all the time, and your chances of success depend on how many allies you have, how wide is your network of support.”

Monkeys cultivate relationships by sitting close to their friends, grooming them at every possible opportunity and going to their aid—at least, when the photo op is right.

“Rhesus males are quintessential opportunists,” Dr. Maestripieri said. “They pretend they’re helping others, but they only help adults, not infants. They only help those who are higher in rank than they are, not lower. They intervene in fights where they know they’re going to win anyway and where the risk of being injured is small.”¹⁰

**TYPICAL ECONOMIC ASSUMPTIONS**

Our terms status-seeking and status symbols emanate from Weber’s classic *Class, Status and Party*. Weber’s novel concept of status groups proved to be both more flexible and more penetrating psychologically than Marx’s dichotomy of the class struggle.¹¹ For Weber, status was like class for Marx,
but it was more a function of wealth, which could be earned and was unrelated to mere birthright. Many of the bourgeoisie become radical, and many poor people become management. Weber’s writing directly influenced author Thomas Wolfe, who noted that many parts of status took things unrelated to money, such as courage and skill. Consider what a navy aviator does in climbing what Wolfe called the “ziggurat of status” in his classic book *The Right Stuff*, where the very small niche of aviators had their own highly specific criteria of accomplishment and respect.¹²

Status as a motivator is well known by economists. In economics theory, all the big names generate interesting quotes about the relevance of status. Not merely Karl Marx, but Thorstein Veblen (1899) and his notice of conspicuous consumption, focused on status, the societal relative position, as a motivating force in individual lives.¹³ This has been addressed in theoretical economics models in more recent research by Pesendorfer (1995) and Rayo and Becker (2006), where status seeking is modeled as a successful way to signal quality or evaluate one’s productivity.¹⁴ Behavioralists like Dan Ariely (2008) have noted that the complexity of calculations leads many people to borrow from the wisdom of crowds, and use peers for benchmarking.¹⁵

Economists have shown an incorporation of a concern for social context that alters results of traditional growth models, tax policy, public goods, social norms, charity, health insurance, and repeated interactions.¹⁶ The hedonic treadmill of Phillip Brickman and Donald Campbell (1971) considers humans as on a treadmill having to run faster merely to stay in the same place, because the benchmark keeps moving forward.¹⁷ This has been applied to the equity premium puzzle (see Chapter 6) in formal models such as George Constantinides’s habit formation model (1990), and the keeping-up-with-the-Joneses utility function of Andrew Abel (1990).¹⁸

These approaches, ones that are generally based on past consumption as a reference point, are not enough. They merely move the consumption, or wealth level basically back to zero as the economy grows, exaggerating the relative volatility of wealth in each prospective period. You still get risk premiums related to volatility in consumption, or wealth, or whatever it is that makes up the SDF, in utility functions based on past consumption. Thus, it can explain the Easterlin Paradox, and perhaps the equity premium puzzle, but then not the general absence of risk-return relations within all the asset classes. The fact that highly volatile equities, which have the highest covariances with the market, and consumption, do worse than low volatility equities remains the important counterfactual to these solutions.

**Virtue of Selfishness**

The prisoner’s dilemma is the famous game, referred to in the movie *A Beautiful Mind* about John Nash, where two people choose whether to
cooperate or not cooperate, without knowing what the other party will do. In the one-period game, the Nash equilibrium is for both to not cooperate—the bad outcome. But in repeated games, people generally cooperate and get to the optimal equilibrium. One can think of reciprocal altruism as the nice strategy one plays in a repeated prisoner’s dilemma game, all with the goal of maximizing one’s selfish payout over a long sequence of prisoner dilemma games. Economist Robert Axelrod showed how a tit-for-tat algorithm bested a variety of complicated algorithms in repeated prisoner’s dilemma tournaments, and suggested a rather moral strategy: be nice, be provocative (tit-for-tat), and be forgiving (one tit per tat). Evolutionary biologist Robert Trivers noted that reciprocal altruism could be a dominant strategy for a selfish gene, noting the value of forming positive sum alliances.

Much of the logic of reciprocal altruism is described in Robert Wright’s book *Nonzero*, where he argues that the fact that interactions can be positive sum, and requires some intelligence to implement correctly (one must keep track of how others cooperate), this is an argument for the inevitable evolution of intelligence. An example of reciprocal altruism is blood-sharing in the vampire bat, in which bats feed regurgitated blood to those who have not collected much blood themselves knowing that they themselves may someday benefit from this same donation; cheaters are remembered by the colony and ousted from this collaboration. This gives rise to complicated game theoretical issues of an abstract nature, but also, all the petty emotions and tactics of a high school social circle: moralistic aggression, gratitude, guilt, subtle cheating, and coalitions. Thus, reciprocal altruism is self-interested behavior, and it is more complex in real life because invariably the state space is not as simple as the prisoner’s dilemma, and involves remembering how people behave, who they are friends with, their cues. Reciprocal altruism acts as a counter to mere continual, shortsighted selfishness because such people will not be successful in benefiting from these positive-sum interactions that allow an individual to reap the benefits of mutual gains from trade.

One must remember that the selfish behavior initially described by Adam Smith was seen as antithetical to a good society, and socialists and syndicalists tried to argue that people were not that Machiavellian. Opportunists used Marxism as a pretext for simple oppression, and the systems they built based on incorrect premises—even if merely pretexts—were doomed to fail. The Invisible Hand implies the natural competitive equilibria of individuals acting in their own self-interest are socially desirable, while reciprocal altruism makes us empathetic and compassionate. It is not obvious, but selfless animals are hardly nice. Ants are selfless, surrendering themselves to the greater good of the colony without hesitation, yet they are also the most warlike animals, nasty neighbors. Selfishness is consistent with morality because if you don’t value yourself, how can you value others?
Rational self-interest can even lead to a variety of emotions. Robert Frank’s book *Passions Within Reason* argues that there are emotional rewards to helping those who deserve our aid and hurting others who deserve our ire.\(^2\) He notes our emotions precommit us to keeping our promises and carrying out our threats, so that we gain in the long run by not being able to make the dispassionate calculation. In effect, we have internal mechanisms that make us good borrowers in a game of reciprocal altruism—built-in incentive structures to pay back. We gain because others will trust our promises and respect our threats. It’s costly for me to lie to you if I feel shame, sympathy, and guilt. Preferences that might seem petty may be necessary for an efficient resolution to a competitive or cooperative circumstance, allowing us to credibly signal we will not renege.

**Why Envy Is Virtuous**

Simple self-interest has moved from a Machiavellian vice to something that generates a social optimum (the Invisible Hand), to something natural (through evolutionary biology), to something morally good (reciprocal altruism is enlightened self-interest). Economists take a pleasure in knowing that something other disciplines considered a vice, something to exterminate in society, underlies the relative success in economics relative to the other soft sciences. The premise of selfish behavior seems more robust, empirically, than the wishful thinking of sociology, anthropology, or the prurient drives of Freudian psychology. The desire for power, the envy, the schadenfreude, within a relative status maximizer, however, would be starting all over in a sense, trying to rehabilitate envy the way it did with greed (which took 200 years, after all).

In the traditional model of empathy, I care about your happiness, and both your happiness and my happiness is a traditional one that increases in wealth. In that case, however, I should not care about the relative poverty in the developed world, because the poor in the United States, in relation to the history of man and the current world, are materially rich.

In contrast, in a status-oriented utility function, my caring about you means not only do I want you to not be poor in absolute wealth, I do not want you to be poor in relative wealth. I care about the poor in the United States even though they are rich in material terms relative to most of human history. Envy is necessary for compassion in a developed economy. Our empathy for others’ envy makes people better neighbors, better salesmen. It is more enjoyable to talk to someone who takes a sincere interest in your concerns, and those concerns involve relative status.

Francois de la Rochefoucauld noted that “we all have the strength to withstand the suffering of others,” and while a superficially sad observation,
it is clearly useful that we care more about ourselves than anyone else, because ant hives and bee colonies make Orwell’s 1984 seem like a 1960s commune (though if I were haploid, I’d think differently). But that we care about the relative status of others, to some degree, is probably essential too. Empathy combined with mere selfishness leads to a great amount of indifference because most people suffering the slings and arrows of modern misfortune can be mocked as mere whiners. Yet the United States produces many well-received books about how inequality is bad and getting worse, and how we need to do something now, just as it always has. Most people care about the poor in the United States, even if their strategies for alleviating their suffering differ, in spite of the fact that they are rich in the context of human history.

**Why Economists Dislike Envy in General**

Assume people are ranked in status from 1 to 100. Now anything that changes their rank order, makes the one who moved down, worse, the one who moved up higher, or better, this situation is ambiguous. Furthermore, a solution that makes everyone richer, keeping the rank order that same, does not make them better. While maybe true, this is not something one thinks should be true. I was surprised when an economist who looked at my approach to risk and return by a relative status function replied that it does not make sense because it implied that the aggregate wealth in the economy did not matter. It was inconceivable for him to think that a United States with 50 percent more GDP is no happier than the current United States, even though Easterlin’s Paradox suggests this will be the case. If we are basically envious, not greedy, creatures, my great-grandchildren will have material comforts beyond my dreams, but still suffer the same amounts of pleasure and pain. I think this is a good forecast, even if I send them a time capsule telling them how hard life was when I was born (I used to change my own channel on the TV—by hand!).

Looking at the difference between the developed and undeveloped countries, which magnifies small differences in growth rates over generations, we see the advantages in social welfare, the arts, the sciences, from having greater wealth. Also, the mores and customs of societies that grow are more compatible with my values than those of a static society, as rates of violent death have decreased considerably since the industrial revolution, probably because the value of life is so much higher. Further, the endemic hypocritical rent seeking and free riding in egalitarian schemes have a much less salutary effect on individuals than mere greediness, and top-down policies to generate equality generally do not get rid of inequality; rather, they push it into political power or market wealth. Thus, I am a libertarian who thinks
people should generally be left alone, and redistribution should be kept to a minimum. Yet I also think it probable that people in the West will be just as happy after a century of growth as they are today. While I may be indifferent to my status when I’m freezing or starving, the situation is much different when those basic needs are met.

The naturalistic fallacy moves from descriptions of how things are to statements of how things ought to be. The moralistic fallacy moves from statements about how things ought to be to statements about how things are; it assumes that the world is as it should be. This, sadly, is a fallacy; sometimes things aren’t as they ought to be. It may be we are status maximizers, and that, sadly, this implies economic growth will not lead to a happier society, and bickering over growth-retarding redistribution is the optimal strategy for individuals, and also that maximizing GDP has ambiguous effects on social welfare. This is somewhat depressing and it is interesting to see smart people fall prey to the moralistic fallacy, that ought proscribes is. For example, libertarians are quick to highlight the latest paper that finds contrary results to the Easterlin Paradox as if it completely refutes decades of research. Economists like the thought that, with rational self-interest, positive and normative theory are generally the same: What people actually do is what they should be doing. If people are relative status maximizers, their lectures on people merely trying to maximize consumption and the implication that aggregate growth is therefore the priority, one cannot help but think they are like missionaries telling the natives what their morals are.

This whole chapter may be considered a merely abstruse way of saying we are inveterate benchmarkers, motivated more by envy than by greed, though these are often consistent with each other. Many highly esteemed economists have applied this parochially to various issues. All I am proposing is to apply this more broadly. Such a proposal does not explain everything—for instance, why risk takers are generally overly optimistic, or why people have an inordinate desire for very safe assets—but it is a necessary assumption for explaining why, year after year, the most highly volatile assets tend to have no risk premium.