Forthcoming, The Journal of Economic Education

The Treatment of Smith's Invisible Hand¹

Jonathan B. Wight University of Richmond

March 2006

Abstract

Adam Smith's metaphor of an invisible hand represents the instincts of human nature that direct behavior. Moderated by self-control and guided by proper institutional incentives, actions grounded in instincts can be shown to generate a beneficial social order even if not intended. Smith's concept, however, has been diluted and distorted over time through extension and misuse. Common misperceptions are that Smith unconditionally endorsed *laissez faire* markets, selfish individualism, and Pareto efficiency. The author draws upon recent literature to clarify Smith's meaning and to discuss ways of improving its classroom presentation. The author argues that the invisible hand operates within a variety of institutional settings, and that a number of arrangements are compatible with economic progress.

1 Introduction

"Does what [Adam Smith] said matter? It should. If what he meant by the invisible hand is misunderstood, then what it is mistakenly said to mean may be misunderstood also." -- William Grampp (2000, 442)

Adam Smith's "invisible hand" represents the unseen instincts of human nature that motivate and direct behavior. Channeled through appropriate human institutions, the invisible hand can generate a spontaneous and beneficial social order. However, institutions are often destructive and work at cross purposes. Hence, to understand progress one must study both human nature and the path dependent history of human institutions. In popular culture, however, the metaphor of the invisible hand has become a catch-phrase for the magical workings of markets alone, or the price system, or even for the moral foundations of capitalism. It is evoked as a mantra by followers of *laissez faire* economics and used as a vehement curse by market detractors. Economists themselves disagree when it comes to the varying treatments

of the concept (Persky 1989; Evensky 1993; Rothschild 1994; Grampp 2000; Khalil 2000a; and Vaughn 2002). Many teachers and textbook writers are likely perplexed. In this article I provide an overview of the debate surrounding the invisible hand and offer a consistent interpretation based on Smith's two books (1981, 1982c). The literature on the invisible hand is voluminous, and this treatment covers only the highlights. A resource guide for instructors is contained in the Appendix.

The metaphor of an invisible hand has been part of English literature at least since Shakespeare. Macbeth, for example, implores the dark night to cloak his impending crimes with "thy bloody and invisible hand" (Rothschild 1994, 319). Adam Smith (1723-1790), who began his career teaching rhetoric, was surely familiar with this phrase and had no qualms about borrowing from earlier writers (as he did in the famous pin factory example). Smith invoked the invisible hand three times, but never more than once in the same work. Smith's first usage occurred in his "Essay on Astronomy" (likely written before 1758, but published only in 1795 after Smith's death.) Here superstitious persons ascribe thunder and lightening to "the **invisible hand** of Jupiter" (1982a, 49, emphasis added).

Smith's second usage appeared in *The Theory of Moral Sentiments*, first published in 1759. Wealthy landlords are said to delude themselves into over-producing food, resulting in leftovers for the poor. The consequence is that the rich are unwittingly "led by an **invisible hand** to make nearly the same distribution of the necessaries of life, which would have been made, had the earth been divided into equal portions among all its inhabitants...." (1982c, 184, emphasis added). The conclusion is that even vastly unequal distributions of resources would not prevent the poor from consuming something akin to a living wage.

The third version of the invisible hand appeared in 1776 in *The Wealth of Nations*. In a section devoted to the political economy of trade, Smith attempted to show that under conditions of potentially equal profit, business people will prefer to use their capital in domestic trade rather than in foreign trade. This is because entrepreneurs lack familiarity with their overseas partners and may also face questionable legal systems. The unintended consequence

of this is that the home country gains investment, which promotes the social interests of higher domestic output and employment. Some authors infer that these factors make the home country more secure in its national defense, yielding also a public good (Persky 1989; Grampp 2000). Smith wrote:

By preferring the support of domestic to that of foreign industry, [a merchant] 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 (1981, 456, emphasis added).

On the surface the three invisible hands appear unconnected. The first deals with superstition in early belief systems; the second describes a trickle-down theory of income distribution; and the third addresses the role of social capital in keeping investments domestically. To make sense of these seemingly unrelated points we turn to Smith's time period and world view.

2 The Enlightenment Worldview

Adam Smith was a prominent figure in the 18th century Scottish Enlightenment.

Enlightenment thinkers operated within the shadow of Galileo and Newton who had established systems of thought about "the great phenomena of nature" (1981, 767). Before this, "fear and ignorance" engendered the view among primitive peoples that "invisible beings" controlled nature (1982a, 50)—causing storms, floods, and droughts. Modern science made sense of this world "by representing the invisible chains which bind together all these disjointed objects" and introduced "order into this chaos of jarring and discordant appearances...." (1982a, 45-46).

While natural sciences explored the physical world, Enlightenment philosophers looked inward to uncover those invisible principles which could explain the progress of human society. To Smith, "The science which pretends to investigate and explain those connecting principles is what is properly called moral philosophy" (1981, 769). Today this subject encompasses

psychology, philosophy, economics, sociology, political science, and law. Smith taught the moral philosophy sequence at Glasgow University, which consisted of natural theology, ethics, jurisprudence, and expediency (economics). Smith's students mastered ethics and law before applying these concepts to the principles of commerce (Skinner 2002, 358).

Like gravity and electricity of the physical world, Smith believed that invisible natural forces exert a powerful pull on human conduct. What are these principles of human nature? Smith's thesis, developed in *The Theory of Moral Sentiments*, is that instincts fall into three broad categories:

1) Selfish passions center on one's own welfare (self-preservation, satisfaction of bodily desires, and personal achievement). Smith notes:

Every man is, no doubt, by nature, first and principally recommended to his own care; and as he is fitter to take care of himself than of any other person, it is fit and right that it should be so (1982c, 82-83).

2) Social passions (e.g., benevolence, affection, and generosity) desire the positive welfare of others. Smith felt many philosophers such as Hobbes had forgotten or undervalued these powerful and desirable passions. Smith called attention to this omission in the first sentence of the book:

How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it (1982c, 9).

3) *Unsocial* passions (e.g., hatred and resentment) desire the negative welfare of others. Although theologians decry the unsocial passions, Smith noted that "Resentment seems to have been given us by nature for defence, and for defence only. It is the safeguard of justice and the security of innocence" (1982c, 79).

All three sets of passions are necessary for full human expression and success because the instincts serve the purpose of nature: "It is thus that man, who can subsist only in society, was fitted by nature to that situation for which he was made" (1982c, 85). Except among young children or adults improperly socialized, humans do not respond to base instincts in a kneejerk fashion. The raw passions must "be brought down to a pitch much lower than that to which undisciplined nature would raise them" (1982c, 34). Hence, although it is natural to feel the passion of selfishness, it is not natural for an adult to act selfishly without reflection: a healthy self-interest implies the discipline of self-control and a regard for the rights of others.

By what process, then, do humans reflect? Smith's model of "fellow-feeling" posited that humans can empathize with the passions of others. This trait is not a faculty of rationality but of imagination. When our own passions are in alignment with the passions of others we experience pleasure; when they are not we experience pain. Smith was clear that "the pleasure and the pain are always felt so instantaneously" that our reaction to mutual sympathy is not a utilitarian reckoning of self-interest (1982c, 14). Because of fellow-feeling, humans have a strong desire for the social acceptance that comes from pleasing others. A child listens to, and eventually attunes to, the sentiments of parents and peers. A selfish child learns perspective and self-control, coming to see things from the viewpoint of an impartial spectator. Although we seek the approval of others, Smith's important contribution was to insist that ultimately it is the approval of ourselves that we must obtain (1982c, 262). Hence, humans have the capacity for autonomous behaviors that defy social norms. This can explain the evolution of institutions (for example, the eventual abolition of slavery).

Institutions such as family, church, school, and even government play a role in helping an individual acquire self-control so that impulses are moderated. These institutions need to channel man's passions in ways that "establish an identity of interests between public and private spheres" (Rosenberg 1960, 567). A competitive marketplace is an important institution for improving the moral climate because of its incentive structure that ties personal diligence to personal reward (Smith 1981 Book III; Rosenberg 1960, 562). McCloskey noted that "Adam Smith knew that a capitalist society... could not flourish without the virtues" that lubricate the machinery of society and commerce; the growth of the market "promotes virtue, not vice" (1994, 181).

Smith did not put much stock in ethics being taught by philosophers, however. In addition to the marketplace, the fire of moral imagination was stoked by literature, poetry, opera, and visual arts (1982c, 143; Wight 2006). These awaken sympathy and arouse the impartial spectator. A primary function of morals is to promote justice, which is the "main pillar" without which social organization would "crumble into atoms" (1982c, 86). Whereas person and property must be defended by civil and criminal codes, Smith's system of justice relies upon citizens who practice self-command. It is within this context that Smith supposed that property rights, competitive markets, and individual liberty created conditions advantageous for commutative justice.³

One additional feature of Smith's system bears mention—its egalitarian slant. Enlightenment thinkers rejected the elitist notion that either a hierarchical or hereditary authority was necessary to promote the political, economic, or moral order. All men are created equal and it is experience and opportunity, not difference in ability, that distinguished the king or philosopher from the average man. In fact, Smith's moral sentiments put greater trust in the common man than in the rich and powerful.

In short, Smith attempted to understand the instincts of human nature that attract, bind, or repulse humans in society. In modeling behavior Smith goes beyond identifying a raw natural urge. He understands behavior as the product of natural urges *acted upon* by moral conscience, human institutions, and inputs of capital (intellectual, emotional, and imaginative). The invisible chains driving human behavior are complex because our reactions to events have resonating context. This background sets the stage for the economics of the invisible hand.

3 Smith's Economics

Man does not simply act on instincts but creates institutions and moral laws to harness them. Where do the original instincts come from? According to modern evolutionary psychologists, "instincts" are the short-cut reasoning or preference circuits that address specific adaptive problems of natural selection (Cosmides and Tooby 1994, 330). Interestingly, Charles Darwin read *Moral Sentiments* and his intellectual kinship with Smith runs deep (Carey 1998, 435).

Writing a century before Darwin, Smith developed the theme that Nature is the ever-present taskmaster:

Thus self-preservation, and the propagation of the species, are the great ends which Nature seems to have proposed in the formation of all animals. Mankind are endowed with a desire of those ends, and an aversion to the contrary; with a love of life, and a dread of dissolution; with a desire of the continuance and perpetuity of the species, and with an aversion to the thoughts of its intire extinction (1982c, 77).

This passage explains the origin of the natural instincts in the "great ends" of nature. It suggests an invisible hand sympathetic to purposeful action in evolution (Khalil 2000b, 391). Nature commands that there be striving in all living things. But the inducement for striving is not reason, which is "slow and uncertain." Rather, the compulsion to flourish is made a part of man's instincts, without regard to the ultimate beneficial ends that might flow from them:

But though we are in this manner endowed with a very strong desire of those ends, it has not been intrusted to the slow and uncertain determinations of our reason, to find out the proper means of bringing them about. Nature has directed us to the greater part of these by original and immediate instincts. Hunger, thirst, the passion which unites the two sexes, the love of pleasure, and the dread of pain, prompt us to apply those means for their own sakes, and without any consideration of their tendency to those beneficent ends which the great Director of nature intended to produce by them (1982c, 77-78).

Man's effort to better his position through the propensity to "truck, barter, and exchange" (1981, 25) is an example of a passion that is not part of any rational, goal-oriented activity. It arises from man's instinctive desire to be believed and to persuade (1982b, 493). Smith used the phrases "the call" of nature (1981, 100), "the power" of nature (1981, 364), "the passions" of nature (1982c, 25) and the "appetites" of nature (1982c, 165) to refer to the invisible instincts at work. Although the goals of Nature are survival and propagation, man unconsciously attends to these ends through intermediary objectives.

This brings us closer to understanding Smith's meaning of the invisible hand. The phrase appeared in *Moral Sentiments* when Smith explained how people make moral judgments based on perceptions of utility. Smith began the chapter by reviewing David Hume's thesis that humans ascribe beauty to things that are useful. The utility of an object "pleases the master by perpetually suggesting to him the pleasure or conveniency which it is fitted to promote" (1982c, 179). A spectator "enters by sympathy into the sentiments" of the owner of the object, and it is by way of this projected sympathy that the poor aspire to be rich: "When we visit the palaces of the great, we cannot help conceiving the satisfaction we should enjoy if we ourselves were the masters, and were possessed of so much artful and ingeniously contrived accommodation" (1982c, 179).

Smith's innovation over Hume was to hypothesize that humans are hard-wired to see beauty in the suitability or fitness of things—not for the reason that utility might come from it, but intrinsically for the perfection that such order implies (1982c, 180). Smith noted that "We naturally confound [the expected utility] in our imagination with the order, the regular and harmonious movement of the system...." (1982c, 183). Smith gave the example of a man who traded in his old watch for a more accurate one, even though he is still habitually late: "What interests him is not so much the attainment of this piece of knowledge [exact time], as the perfection of the machine which serves to attain it" (1982c, 180). Man comes to love the beauty of order and he aspires for the opulence that would allow him to purchase beautiful and well-adapted machines. This happens despite the fact that greater order and opulence will not make humans any happier. The belief that they do is the great deception that keeps man striving:

And it is well that nature imposes upon us in this manner. It is this deception which rouses and keeps in continual motion the industry of mankind. It is this which first prompted them to cultivate the ground, to build houses, to found cities and commonwealths, and to invent and improve all the sciences and arts.... The earth by these labours of mankind has been obliged to redouble her natural fertility, and *to maintain a greater multitude of inhabitants* (1982c, 183-4, emphasis added).

It is within this paragraph, describing man's instinctive striving for fitness and order, that Smith provided the example of the landlord who overplants his fields. "It is to no [utilitarian] purpose, that the proud and unfeeling landlord views his extensive fields" wrote Smith (1982c, 184). The landlord's motivation reveals a love of order and perfection—so he can observe the fields serving their fitted purpose. The next paragraph emphasizes that Smith is telling this story to illustrate "The same principle, the same love of system, the same regard for the beauty of order...." (1982c, 185).

Because the landlord's belly cannot consume all of the harvest, leftovers go to the poor in exchange for their "baubles and trinkets" (1982c, 184). Thus landlords

are led by an **invisible hand** to make nearly the same distribution of the necessaries of life, which would have been made, had the earth been divided into equal portions among all its inhabitants, and thus without intending it, without knowing it, advance the interest of the society, and *afford means to the multiplication of the species*" (1982c, 184-5, emphasis added).

This is a story not so much about greed as it is a story about man's deepest instincts to arrange and to organize in ways that unintentionally and unknowingly serve the ends of nature. This invisible hand passage should now be read alongside its companion in *Wealth of Nations*:

Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command.... 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 (1981, 456, emphasis added).

This passage is also about man's natural striving for intermediate objectives (security and wealth) that advance nature's goals of survival and procreation. As in *Moral Sentiments*, entrepreneurs seek order in their affairs by using their resources in ways perceived to be most

fit. The instinct for fitness and order can be trusted because it produces results that ultimately (in the right institutional setting) are harmonious and beneficial to society.

With this backdrop it is possible to put forth a tentative definition of the invisible hand from Smith's two books:⁴

The invisible hand is *human instinct*. In the two passages in which Smith uses the phrase explicitly, the invisible hand refers to human instincts to strive for order and opulence.

Recall that Smith's Enlightenment plan is to find those few "invisible chains" that explain society and its progress. Smith, as a member of the Royal Society, was well-versed in the advances of natural science (Schabas 2003). Many of his closest colleagues were researchers into processes of nature. Before Smith wrote about the invisible hand's effect on men of commerce, he had written extensively about the call of nature. He had written that man's reasoning is weak, but his instincts are strong. He had noted that men often acquire a greater love of intermediate objectives than of final ends. Smith's economic readers would have been familiar with this line of thinking. Instincts operate invisibly as a force of nature. As discussed later, the invisible hand is not simply the instinct of self-interest operating alone. Nor is the invisible hand the market or competition or efficiency—although these institutions and concepts may work synergistically with it.

Smith bestowed approbation on the invisible hand for producing outcomes thought favorable to society in the specific instances mentioned. But whether the invisible hand works well or poorly depends on historical circumstances and path dependency. Nozick (1994, 314) observed that "Not every pattern that arises by an invisible-hand process is desirable...." One brief example illustrates this point. Because all humans are reasonably similar, the invisible hand that directs the landlord is the same invisible hand directing the entrepreneur, and it is the same principle directing politicians! The ruler's innate instinct for order creates calamity in the wrong institutional setting—such as when a dictator gains control. In a prescient passage Smith anticipated the excesses of Utopian socialist engineers like Stalin and Mao who, like the

landlord, came to value the order of their ideal plans more than any expected utility derived from them:

The man of system ... is often so enamoured with the supposed beauty of his own ideal plan of government, that he cannot suffer the smallest deviation from any part of it. He goes on to establish it completely and in all its parts, without any regard either to the great interests, or to the strong prejudices which may oppose it.... [But] in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on easily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder (1982c, 233-4).

This underscores the point that for the invisible hand to work well there must be "incentive compatibility" between man's natural passions and man's institutions (Makowski and Ostroy 2004, 6). Human history is littered with failed attempts. We turn to Smith's account of this checkered human progress.

4 The History of Progress

Smith began Book III of *Wealth of Nations* with a chapter, "On the Natural Progress of Opulence." Smith stated that "the order of things" is promoted by the "natural inclinations of man"—which is another way of saying that order is promoted by human instincts. Progress is a natural feature of human history, with an expected progression from hunting and gathering to pasturing to agriculture to industry, and eventually to foreign trade. Much of Book III dealt with how societies failed to achieve their potential because "human institutions … thwarted those natural inclinations" (1981, 377).

Smith gave numerous examples of bad institutions, such as the customs of primogeniture and engrossing, which amassed land in the hands of those with little incentive to produce. Tenured professors receiving a salary, regardless of productivity, were another of Smith's rants. Although man can be ambitious, so can he be lazy. It is the job of institutions to create the appropriate psychic tension by structuring incentives to encourage productivity (Rosenberg 1960). Smith said poor incentives push society into an "unnatural and retrograde order" (1981, 380). Smith's development model is institutionally path dependent, an idea supported by North's more recent conclusions (1993).

Depending upon the impediments to progress imposed by customs, despots, monopolists, or misguided do-gooders, stagnation or decay can last for centuries. What are the circumstances in which the striving for order and opulence can best succeed? The public institutions required are a dependable and fair system of justice, a workable representative legislature, and reasonable regulations of commerce. The private institutions required are competitive markets and individual moral norms. The latter include honesty, integrity, a work ethic, and civic spirit. In several places Smith calls upon a private-public partnership to enhance civic education and to improve the moral climate.⁵

Smith does not rely on morals and socialization alone, however, to generate a good society. Institutions are needed to harmonize private passions with the public interest.

Financial market regulations provide an interesting example. Smith noted that the natural flow of capital will largely be toward investments creating the greatest individual opulence, which when summed over the nation produce the greatest national opulence. Private and public interests thus converge. But Smith carved out a large exception. Some lenders can make more money offering loans to profligates and speculators whose activities contribute more to consumption than to growth. Smith favored an interest rate ceiling of 5 percent to weed out borrowers whose private aims were not in keeping with society's objectives (1981, 356-7). In a related discussion in which the invisible hand appears, Smith considered the problem of capital flight. He theorized that security concerns would lead merchants to congregate their funds domestically, hence no regulations on capital exports were needed to harmonize private

with public interests (1981, 455). The two preceding points should make clear that Smith was not promoting market efficiency in a Pareto sense, but rather dynamic growth in the home country.

Prosperity comes when individuals follow their instincts for creating order and accumulation within an institutional structure that channels those interests in ways beneficial to society. This does not require institutional perfection. In criticizing the physiocrats' insistence on *laissez faire*, Smith noted that "If a nation could not prosper without the enjoyment of perfect liberty and perfect justice, there is not in the world a nation which could ever have prospered" (1981, 674). Development happens from the bottom up and "the natural effort which every man is continually making to better his own condition is a principle of preservation capable of preventing and correcting, in many respects, the bad effects of a political oeconomy" (1981, 674).

Smith's historical approach reminds us that the beneficial spin given to the invisible hand is premised on specific institutional, social, and ethical constructs (Persky 1989; Grampp 2000; Evensky 2001; Meeropol 2004). That is, the incentives that give rise to the trust, character, and legal system are idiosyncratic to the confluence of events, institutions, and individuals populating Smith's time and place.⁶

5 Additional Dimensions

Unintended Consequences, Spontaneous Order, and Providence

One conclusion to be drawn is that decentralized human action can produce beneficial social outcomes even if these consequences are unforeseen and unintended. In Smith's two examples, the invisible hand leads to what Hayek called "spontaneous order" (Vaughn 2002). But as noted previously, there is no guarantee that the invisible hand will produce order or progress without supportive institutions, and nonsupportive institutions do not spontaneously correct themselves. To many writers Smith's invisible hand thus entails more than just an observation about unintended consequences; it is

also a deeper narrative about the hidden order and reason behind unfolding events. Although man is blind to it, he is part of a greater plan, presumably conceived by a benevolent deity (Evensky 1993, 2001). An invisible hand without a sustaining benevolent force behind it "may well fail," according to one reviewer of this article.

Viner traced the history of the benevolent force idea in *The Role of Providence in the Social Order* (1972). Differing versions of this thesis circulated during the Enlightenment period and Smith was certainly aware of the debate. Most scholars, however, do not think Smith held orthodox Christian views despite his Presbyterian upbringing and his having studied for the ministry (Ross 1995, 406). Smith's account placed the origins of man's desires in nature. This can be further pursued by asking: What lies behind nature? Here Smith, as with other Deists or Theists of his day, was fully prepared to say a benevolent deity. This is the final cause of all things, whereas nature is merely the secondary cause. God is the clockmaker, whose springs are nature's instincts, directing men's actions without knowing their ultimate purpose. This is one of the most familiar metaphors used by Smith and other writers of his day (Macfie 1967; Viner 1972; Evensky 1993; Young 1997).

According to Khalil, however, Smith understood God not as an individual but as shorthand for "the purposeful nature which constitutes the living organism" (2000b, 375). Khalil rejected the interpretation that Smith accepted the God-as-intelligent-design view in favor of the Lamarckian concept of "evolutionary optimization" (2000b, 374). Whether Smith's references to God as creator were genuinely felt (as Viner thought), or rhetorically used in self-defense against religious critics, or even declared in jest or irony (Rothschild 2001, 116), the religiously circumspect Smith salted his moral writings with references to God as the "Author of Nature" whose final judgment would come.⁸ These references do not appear in his economic writings.

Selfishness

In the 20th century the invisible hand became a grabbing hand—the foundation for ethical egoism. Moral sentiments operate with different intensities in different realms of life.

Distance tends to weaken sympathy so that the more impersonal a market is the more devoid it

will be of moral sentiments. Smith thus noted that "it is in vain" to expect the help of all others based on "benevolence only," but says we must find ways to address their "self-love" (1981, 26-27). One could surmise that in the commercial sphere only selfish individualism reigns (a view promulgated in popular cultural by movies such as *Wall Street*). It is also a belief endorsed by many economists. Arrow and Hahn in *General Competitive Analysis* (1971), for example, assumed that the instinct for "self-interest" was identical to "greed" (Evensky 1993, 203).

The entrepreneur in *Wealth of Nations* who seeks the highest return on his capital fits this account. The gluttony of the landlord in *Moral Sentiments* is likewise noted. No one could argue that Smith was Utopian about human nature or underestimated the greediness of individuals. But there are several dimensions along which the egoistic account of the invisible hand falls short. First, Smith said that the human instinct for order is not calculated self-interest. Smith's psychological system was founded upon sympathy, and anticipating that others might try to twist this into a theory of self-love, Smith stated explicitly, "Sympathy, however, cannot, in any sense, be regarded as a selfish principle" (1982c, 317).

A second problem with the greed interpretation is that the ends of nature (survival and procreation) require for their fulfillment a high degree of social cooperation and justice. The successful development of these institutions relies upon human virtues that Smith says arise from the nonself-interested passions, namely, the social passions and the unsocial passions. Selfishness is not a sufficient instinct for creating and maintaining a good society. Recent findings in economic psychology bear out the importance of placing self-interest within the context of other human instincts (Thaler 2000; V. Smith 2004).

Third, although many markets are assumed to rely on anonymous exchange, Smith's market examples usually depend upon conversation, civility, and character. Even the wholesale merchant most likely to deal in impersonal distant markets is alert to moral undercurrents. In fact, the merchant's concern for social capital is clearly stated: "He can know better the character and situation of the persons whom he trusts..." (1981, 454). A person of high character is honest not because the law forbids theft, nor is he honest because he has calculated the advantage of appearing trustworthy. A person of character loves virtue itself

(1982c, 22 and 224-5). Transactions costs are lower when a merchant believes his supplier is honest by principle not by calculation.

A fourth problem with the greed interpretation is that Smith clearly condemned it. He pointed out numerous ways in which selfish individuals can produce bad outcomes for society. The instinct for promoting one's own welfare is intense yet it is a passion that must be disciplined alongside other appetites. Smith explicitly said that the moral faculties "superintend" all the other passions and judge "how far each of them was either to be indulged or restrained" (1982c, 165). To accept the greed view one must believe that Smith's two books are completely contradictory, a notion has been thoroughly discredited (Raphael and Macfie 1982, 20-25).

Enlightened Self-Interest

These points lead other authors to an invisible hand of "enlightened" self-interest. One can be honest and just in ways that promote institutions of cooperation and justice—with an eye toward the returns that these produce in the long run. Although it is possible to shoehorn Smith's concepts into this framework, much is lost in translation (Sen 1987; Khalil 1990). Smith himself pointed out the subtle but critical difference between self-control achieved as part of a calculated mode of thinking and one achieved through instinctual sympathy. The calculated approach produces propriety of a "much inferior order" and the predicted behavior is substantially different (1982c, 263).

According to Sen, moral commitment "drives a wedge between personal choice and personal welfare" (1977, 329). Buchanan likewise asserted that ethical constraints on individual behavior are beyond rational calculation (1994, 63). Nor would Smith subsume all interest in others under the rubric of enlightened self-interest. First, the demands on rationality for this to work exceed a human's limited capabilities. Second, calculating one's interest takes time but moral sentiments are felt instantaneously. Smith applauded the view that people can learn to act with enlightened self-interest (indeed, this is one of the moral

justifications for markets), but he explicitly rejected the view that sympathy arises from enlightened self-interest (1982c, 13-14).

Efficiency

Today the invisible hand is most commonly said to mean the process by which competitive markets achieve efficiency through the price allocation mechanism (Persky 1989; Meeropol 2004, 12, fn 14). This is the interpretation given in Standard 9 of the *Voluntary Economic Content Standards for America's Schools*, developed by a group of distinguished educators (Siegfried and Meszaros 1998, 146). This explanation is appealing and fits with much of Smith's thinking. Critics, however, have observed that Smith's writings on the invisible hand do not correspond very well with neoclassical treatments of competition, prices, or distribution (Grampp 2000; Khalil 2000a). Efficiency is not a necessary consequence of the invisible hand nor is it wholly consistent with Smith's goals.

A key point against the efficiency interpretation is that Smith's focus was avowedly nationalistic. His objective was the greatest output and employment growth for Britain. Because capital is a limiting factor, funds employed overseas reduce Britain's dynamic potential. The invisible hand in *Wealth of Nations* operates with the incentives of a particular institutional setting so as to keep capital within Britain's borders. It is paradoxical that the efficiency interpretation for the invisible hand persists when Smith said that asymmetric information and high transactions costs are what limited global capital flows. Khalil observed with irony that Smith's invisible hand highlights how "national welfare advances when markets fail" (2000, 374).

Finally, Smith supported regulatory institutions that were vital for achieving his growth objective yet clearly obstructed consumer sovereignty and the market equilibrium (e.g., financial regulations that kept capital out of the wrong hands). In this, as in some other examples, Smith is not endorsing the Pareto-efficient model. To suggest that competitive market equilibria would produce the results that Smith intends omits too much of his broader thesis.

Laissez Faire

Smith was passionate in denouncing government intervention but his tirades were mainly directed against those who would seek home country monopolies and then restrict imports to bolster these investments. Many writers have pointed out that Smith was not averse to government investments or controls in some sectors of the economy for other motives. Smith explicitly debunked Quesnay's system of perfect liberty as theoretically and practically unappealing (1981, 673-4). To insist on an ideal system of political economy was akin to a doctor prescribing one exact diet of food to be followed by every patient. The human body, Smith said, maintains "the most perfect state of health under a vast variety of different regimens" (1981, 674). Smith's support of markets was pragmatic and he endorsed a range of interventions when he believed they would advance his objectives (Viner 1927, 153-54; Pack 1991; Grampp 2000, 460). 10

There are many alternative approaches to analyzing Smith's invisible hand: what it is, where it comes from, what it does, and its ramifications and complications (Samuels 2004, 5). These interpretations offer rich avenues for understanding economic and social processes.

Many conflicting views likely endure because of Smith's expansive rhetoric, which was prone to inconsistency and exaggeration. Samuels thus lamented "I wish that Smith had had an editor" (2004, 20).

6 Conclusion

Smith's insights resonate today across a broad spectrum of topics and disciplines (Wight 2002a). His ideas percolate in the works of a number of Nobel prize winners, suggesting that economics students may have something to learn from the history of thought. In this light, Smith's metaphor of the invisible hand "is arguably the most important concept in modern social thought" (Khalil 2000b, 373). Smith had no illusion that human models could explain the whole world. He did wish to formulate a model that would reveal some of the hidden

"wheels" and "springs" behind human society. He was quite willing to point out ways in which the unfolding of human society produced disaster, and he gave two famous examples of the invisible hand in which things worked for the better.

The interpretation of Smith's invisible hand offered here is that it represents man's natural instincts channeled by institutions and self-command. A person's highest instincts are to persuade, to be believed, to sympathize, to fashion order, to truck and barter, and to better one's conditions in the surroundings. These are invisible passions that lead persons, both in *Moral Sentiments* and *Wealth of Nation*. Although self-interest is a dominant and necessary passion in the economic realm, it does not operate in isolation. Experiments show that even graduate students in economics have not lost an instinctual passion for reciprocity and justice (V. Smith 2004).

There are important lessons for economic students. If human instincts are allowed to operate within incentive-compatible environments they are capable of producing not only private benefits but, in many cases, social benefits that are not intended. Hence one does not need to start from a virtuous motive such as benevolence to produce something of value for society. In a supportive institutional structure, decentralized action can generate a spontaneous order that yields dynamic growth with liberty. No one ideal system of political economy exists to accomplish this and Smith noted that many variations will work tolerably well. This understanding reasonably fits the facts of the modern world: rich industrial democracies exhibit a diversity of institutions and a range of mixed market systems. Smith, a pragmatist rather than an ideologue, was optimistic that the invisible hand instincts could naturally lead to progress over time.

Smith's broader moral and psychological perspectives bear mentioning. Teachers should at minimum note that the invisible hand does not constitute an endorsement of selfish individualism. Smith's view of progress requires that private and public institutions promote moral development, without which markets and society fail to achieve their potential. Vernon Smith, in support of Smith's view, says he "cannot overemphasize" that "we are all a collage of the norms and rules of human exchange, and that the rules—which we do not observe

consciously, and of whose work in enabling social stability we are unaware—in turn depend upon context" (2004, 72). Individuals and institutions form the tapestry of society. The system of natural liberty espoused by Smith is "his constant effort to bind together the theological, jurisprudential, ethical, and economic arguments into one comprehensive, interrelated system of thought—his interpretation of the 'great system of nature" (Macfie 1971, 599).

Economics instructors are encouraged to refresh their insights with some of the modern scholarship on Smith. Smith debunked the "greed is good" philosophy, ridiculed the notion that wealth alone could provide happiness, and built an elaborate psychological foundation for behavior that goes well beyond egoism. Students getting a one-dimensional account of the invisible hand—in which self-interest is elevated to greed—miss important behavioral issues that are being rediscovered in experimental labs today. My own experience in teaching about Adam Smith is that students appreciate receiving a fuller view of human nature and the motives for action.

Appendix: Resources for Instructors

Books by Adam Smith

Glasgow University produced a definitive collection of *The Works and Correspondence of Adam Smith*. These volumes contain extensive cross-referencing, expanded indexing, and introductory essays encapsulating significant scholarship. The Glasgow Editions were reprinted by the Liberty Fund in paperback format. These volumes are also available for free in electronic form (see Online Resources). The Liberty Fund titles are:

- Vol. 1: *The Theory of Moral Sentiments*. 1982c [1757]. This book went through six editions in Smith's lifetime, the last completed shortly before his death in 1790.
- Vols. 2 and 3: An Inquiry Into the Nature and Causes of the Wealth of Nations. 1981 [1776]. This work went through four editions during Smith's lifetime, the last appearing in 1786.
- Vol. 4: Essays on Philosophical Subjects. 1982a [1795]. Published posthumously a few years after Smith's death, this volume contains a number of Smith's important essays, including "The History of Astronomy" and "Of the Imitative Arts." It also contains the only contemporaneous biography by Smith's friend, Dugald Stewart.
- Vol. 5: Lectures on Rhetoric and Belles Lettres. 1985. Smith began his career teaching rhetoric. These are a student's notes of Smith's course at the University of Glasgow, 1762-3.
- Vol. 6: Lectures on Jurisprudence. 1982b. This contains two sets of student notes of lectures Smith gave at the University of Glasgow, 1762-3 and 1766. They analyze the rise and forms of government, laws and regulations. A book on this subject was to have formed Smith's planned trilogy uniting morals, justice, and markets. Smith died before its completion.

Vol. 7: *The Correspondence of Adam Smith*. 1987. In addition to letters, this volume contains important documents linked to Smith, such as his analysis of the war in the American colonies.

A modern biography incorporating the new scholarship was written by Ross (1995) as part of the Glasgow project, *The Life of Adam Smith*.

Instructional Materials

Many sources cited in this paper could be used in upper-level undergraduate courses. The introductory essays to the Glasgow editions of *Wealth of Nations* and *Moral Sentiments* are useful in summarizing the substance of Smith's major works and placing them in context of each other and his time. Tribe (1999) provides a critical assessment of Smith's work. Skinner (2002) sketches a rich overview of Smith. An appraisal of Smith's morals and his economic system can be found in Evensky (2001). Fleischacker's (2004) recent contribution, *On Adam Smith's Wealth of Nations: A Philosophical Companion* provides interesting essays for advanced undergraduates. Excerpts of Smith's writings are available in Otteson (2004), *Adam Smith: Selected Philosophical Writings* and Heilbroner (1986), *The Essential Adam Smith*.

Faculty who wish to introduce Smith's ideas to principles students have several good options. For a short introduction to Smith's life and times, consider the classic chapter from Heilbroner's (1999), The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers. For a longer view of this theme, see Muller (1995), Adam Smith: In His Time and Ours. Fiction can provide an effective vehicle for the transmission of economic ideas, and this journal has devoted space for articles discussing alternative pedagogies (Watts 2002). In Saving Adam Smith (2002), Wight constructs an "academic" novel to bring Adam Smith back to life, using Smith's own words for much of the dialogue. Morals and markets are discussed, with endnotes and a literature review.

Online Resources

The Liberty Fund maintains an electronic library of Smith's works, making it easy to search for words or to download complete books. To access the Glasgow editions texts go to www.libertyfund.org. Select "The On-Line Library of Liberty" and search for books by Adam

Smith. The History of Economic Thought Website maintained at the New School contains a collection of essays and articles (http://cepa.newschool.edu/het/index.htm). Finally, the Adam Smith Society, founded in 1995, encourages interdisciplinary scholarship on Smith and provides forums for sharing findings (www.adamsmithsociety.org).

Notes

⁴ The "invisible hand of Jupiter" does not fit this pattern, although Macfie (1971, 596) noted that there is no inconsistency. Primitive peoples attempted to make order out of their experiences by ascribing events to invisible *gods*. Smith attempted to make order out of human experience by ascribing events to invisible *instincts*.

⁵ Civic virtues are to be encouraged for many reasons including national defense. Publicly-supported education would help overcome the numbing effects of the division of labor, and would more generally succeed in uplifting society by reinforcing people's notions of duty and character (1981, 781-85). Smith also called on civil magistrates not only to preserve the peace but to promote prosperity by discouraging vice and promoting virtuous conduct "to a certain degree" (1982c, 81).

¹ The author acknowledges valuable suggestions from Andrea Maneschi, Elias Khalil, David Brat, Rob Dolan, two anonymous referees, and the editor.

² The pin factory illustrating the division of labor appeared in Voltaire's *Candide* (1759) and still earlier in an article by Delaire (1755) in Diderot's *Encyclopédie*.

³ Although distributive justice is an important concern (Young 1997), Smith's main interest was commutative justice (fair rules). Paradoxically, however, the invisible hand of *Moral Sentiments* resulted in a redistribution of income that Smith implied was desirable.

⁶ For example, the preference for home country investments is not a necessary feature of all economies. Recent experience suggests that capital flight can occur even when countries have reasonably efficient market systems.

⁷ Smith noted: "The wheels of the watch are all admirably adjusted to the end for which it was made, the pointing of the hour.... If they were endowed with a desire and intention to produce it, they could not do it better. Yet we never ascribe any such desire or intention to them, but to the watch-maker, and we know that they are put into motion by a spring, which intends the effect it produces as little as they do…. we are very apt to impute to that reason, as to their efficient cause, the sentiments and actions by which we advance those ends, and to imagine that to be the wisdom of man, which in reality is the wisdom of God" (1982c, 87).

⁸ Smith noted that man's moral compass may be weak, so that humans come to depend upon a belief in the afterlife with an "all-seeing Judge of the world, whose eye can never be deceived and whose judgement can never be perverted." Humans believe that in this "higher tribunal" to come "exact justice will be done" (1982c, 131-2). This is not quite the same thing as saying that Smith himself believed in an afterlife.

⁹ Proponents of the "Adam Smith Problem" theorize that *Moral Sentiments* was the naïve work of the young professor whereas *Wealth of Nations* reflected Smith's mature opinions. According to this view, Smith's two books are contradictory. This thesis is untenable on several levels. Smith took *Moral Sentiments* through six editions, the last completed just a few months before he died. Moreover, Smith explicitly outlined a planned trilogy of books on morals, the economy, and justice (1982c, 342). He died before the last book could be completed. Most scholars accept *Moral Sentiments* and *Wealth of Nations* as complementary parts of a broader (if

unfinished) scholarly plan. There are no theoretical conflicts, only much "ignorance and misunderstanding" (Raphael and MacFie 1982, 20).

¹⁰ Viner noted that, "Adam Smith was not a doctrinaire advocate of *laissez faire*. He saw a wide and elastic range of activity for government, and he was prepared to extend it even farther if government, by improving its standards of competence, honesty, and public spirit, showed itself entitled to wider responsibilities" (1928, 153-54).

References

- Arrow, K. F. and F. H. Hahn. 1971. General competitive analysis. San Francisco: Holden Day.
- Buchanan, J. M. 1994. *Ethics and economic progress*. Norman, OK: University of Oklahoma Press.
- Carey, T. V. 1998. The invisible hand of natural selection, and vice versa. *Biology and Philosophy* 13 (3): 427-42.
- Cosmides, L. and J. Tooby. 1994. Better than rational: evolutionary psychology and the invisible hand. *American Economic Review* 84 (May): 327-32.
- Delaire, A. 1755. Epingle [Pins]. In D. Diderot, ed. Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, volume 5: 803-7.
- Evensky, J. 1993. Ethics and the invisible hand. *Journal of Economic Perspectives* 7 (2): 197-205.
- —. 2001. Adam Smith's lost legacy. Southern Economic Journal 67 (3): 497-517.
- Fleischacker, S. 2004. On Adam Smith's Wealth of Nations: A philosophical companion.

 Princeton, NJ: Princeton University Press.
- Grampp, W. D. 2000. What did Smith mean by the invisible hand? *Journal of Political Economy* 108 (3): 441-64.
- Heilbroner, R. L. 1986. The Essential Adam Smith. New York: W. W. Norton and Co.
- ——. 1999. *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers*. 6th ed. New York: Simon and Schuster.
- Khalil, E. L. 1990. Beyond self-interest and altruism: A reconstruction of Adam Smith's theory of human conduct. *Economics and Philosophy* 6 (2): 255-73.
- —. 2000a. Making sense of Adam Smith's invisible hand: Beyond Pareto optimality and unintended consequences. *Journal of the History of Economic Thought* 22 (1): 49-63.
- —. 2000b. Beyond natural selection and divine intervention: The Lamarckian implication of Adam Smith's invisible hand. *Journal of Evolutionary Economics* 10 (4): 373-93.
- Macfie, A. 1967. *The individual in society: Papers on Adam Smith.* London: George Allen and Unwin, Ltd.

- —. 1971. The Invisible Hand of Jupiter. *Journal of the History of Ideas* 32 (4): 595-99.
- Makowski, L. and J. M. Ostroy. 2004. The invisible hand. Duke University Workshop Papers (October).
- McCloskey, D. 1994. Bourgeois virtue. American Scholar 63 (Spring): 177-91.
- Meeropol, M. 2004. Another distortion of Adam Smith: The case of the 'invisible hand'. Political Economy Research Institute Working Paper Series, No. 79. Amherst, MA: University of Massachusetts.
- Muller, Jerry. 1995. *Adam Smith: In his time and ours: Designing the decent society.* Princeton: Princeton University Press.
- North, D. C. 1993. Economic performance through time. *American Economic Review* 84 (June): 359-68.
- Nozick, R. 1994. Invisible-hand explanations. American Economic Review 84 (2):314-18.
- Pack, Spencer J. 1991. Capitalism as a moral system: Adam Smith's critique of the free market economy. Brookfield: Edward Elgar Publishing.
- Persky, J. 1989. Retrospectives: Adam Smith's invisible hand. *Journal of Economic Perspectives* 3 (Fall): 195-201.
- Raphael, D. D. and A. L. MacFie. 1982. Introduction to *The theory of moral sentiments*. Glasgow edition. Indianapolis: Liberty Fund.
- Rosenberg, N. 1960. Some institutional aspects of the *Wealth of Nations*. *The Journal of Political Economy* 68 (6): 557-70.
- Ross, I. S. 1995. The life of Adam Smith. Oxford: Clarendon Press.
- Rothschild, E. 1994. Adam Smith and the invisible hand. *American Economic Review* 84 (2): 319-22.
- ——. 2001. Economic sentiments: Adam Smith, Cordorcet, and the enlightenment. Cambridge,
 MA: Harvard University Press.
- Samuels, W. J. 2004. Invisible hand. Presented to the Summer Institute for the Preservation of the Study of the History of Economics, George Mason University (July 28).

- Schabas, M. 2003. Adam Smith's debt to nature. *History of Political Economy* 35, annual supplement: 262-81.
- Sen, A. 1987. On ethics and economics (Oxford: Blackwell).
- ——. 1977. Rational fools: A critique of the behavioral foundations of economic theory. *Philosophy and Public Affairs* 6 (Summer): 317-44.
- Siegfried, J. J. and B. T. Meszaros. 1998. Voluntary economics content standards for America's schools: Rationale and development. *Journal of Economic Education*. 29 (Spring): 139-49.
- Skinner, A. S. 2002. Adam Smith. The new Palgrave dictionary of economics. NY: Palgrave.
- Smith, Adam. 1981 [1776]. *An inquiry into the nature and causes of the wealth of nations*. R. H. Campbell and A. S. Skinner, eds., Glasgow edition. Indianapolis: Liberty Fund.
- ——. 1982a [1795]. Essays on philosophical subjects. W. P.D. Wightman and J. C. Bryce, eds., Glasgow edition. Indianapolis: Liberty Fund.
- —. 1982b. *Lectures on jurisprudence*. R. L. Meek, D. D. Raphael, and P. G. Stein, eds. Glasgow edition. Indianapolis: Liberty Fund.
- ——. 1982c [1759]. *The theory of moral sentiments*. D. D. Raphael and A L. Macfie, eds. Glasgow edition. Indianapolis: Liberty Fund.
- —. 1985. *Lectures on rhetoric and belles letters*. J. C. Bryce and A. S. Skinner, eds. Glasgow edition. Indianapolis: Liberty Fund.
- ——. 1987. *The correspondence of Adam Smith*. E. C. Mossner and I. S. Ross, eds. Glasgow edition. Indianapolis: Liberty Fund.
- Smith, V. 2004. Human nature: An economic perspective. Daedalus 133 (Fall): 67-76.
- Thaler, R. H. 2000. From homo economicus to homo sapiens. *Journal of Economic Perspectives* 14 (Winter): 133-41.
- Tribe, K. 1999. Adam Smith: Critical theorist? Journal of Economic Literature 27 (2): 609-32.
- Vaughn, K. I. 2002. Invisible hand. The new Palgrave dictionary of economics. NY: Palgrave.

- Viner, J. 1927. Adam Smith and laissez faire. The Journal of Political Economy 35 (2) (1927): 198-232. Reprinted in J. M. Clark et al., Adam Smith, 1981-1926. Chicago: University of Chicago Press.
- —. 1972. The role of providence in the social order. Princeton: Princeton University Press.
- Voltaire. 1999 [1982c]. Candide. Boston: Bedford/St. Martin's Press.
- Watts, M. 2002. How economists use literature and drama. *Journal of Economic Education* 33 (4): 377-86.
- Wight, J. B. 2002a. The rise of Adam Smith: Articles and citations, 1970-97. *History of Political Economy* 34 (1): 55-82.
- —. 2002b. *Saving Adam Smith: A tale of wealth, transformation, and virtue.* Upper Saddle River, NJ: Prentice Hall.
- ——. 2006. Adam Smith's ethics and the 'noble' arts," *Review of Social Economy* (forthcoming June 2006).
- Young, J. T. 1997. Economics as a moral science: The political economy of Adam Smith.

 Cheltenham, UK: Edward Elgar.