What Did Smith Mean by the Invisible Hand?

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The invisible hand is not a power that makes the good of one the good of all, and it is not any of a number of other things it is said to be. It is simply the inducement a merchant has to keep his capital at home, thereby increasing the domestic capital stock and enhancing military power, both of which are in the public interest and neither of which he intended. Smith's exposition discloses how his rhetorical sallies could disfigure his economics, confuse his argument for free trade, and make him play fast and loose with facts and the ideas of others.

If classical economics were ever given a musical setting—unlikely but not inconceivable, an oratorio perhaps, subsidized by a cunning National Endowment for the Arts—the title surely would be *Three First Words*, and they would be "an invisible hand." The composition would open with plainsong, which is in keeping with the apparent simplicity of the words, and would end in dissonance, and that is in keeping with the diverse and contradictory ways the words have been interpreted.

They must be the most familiar of all of the words that Smith wrote, certainly the most familiar to people who have read more about than by him. If the attention the invisible hand has gotten is

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a measure of its importance, it is indeed important. But that is not always a reliable measure.

In my interpretation, the invisible hand is more interesting than it is important. It is a part of an argument for free trade that is astute in several places, is shrewd in a few, specious in some, and in its entirety makes one believe Smith adapted his discourse as much to the misconceptions of his readers as to the truths he wanted them to hold. Or, briefly, the argument shows Smith could be the buncombe artist as well as the professor. Another reason the invisible hand is interesting is that it has become a rhetorical device in the polemics over economic policy, used more often than not as a pejorative to dismiss a simple-minded (or any other kind of) belief in the market. Still another reason is that there is little or no support in what Smith wrote that can substantiate the interpretations it has been given, thus offering another example of how the words of a great man can mean different things to his readers and can be made into something that he himself would not recognize.

In saying it is more interesting than important, I simply mean it does not have a principal place in the *Wealth of Nations* or even a salient place. It is related to his ideas about domestic capital, and they are important, but they do not stand or fall with it. It also has a place in the leading proposition of Smith's economic policy, which is that defense is more important than wealth. But, again, the proposition does not rest on the invisible hand and can do without it.

While much, although not all, of what has been said about it by its interpreters is related to ideas that are in the *Wealth of Nations*, somewhere or other, they are not (with a single exception) ideas that Smith himself made a part of it when he wrote about the invisible hand.

Does what he 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. For example, to interpret the invisible hand as the price mechanism, which it is not, is likely to make one overlook the numerous reservations Smith had about the price mechanism or what he called the simple system of natural liberty, which, on examination, is seen to be neither simple nor systematic and is by no means meant for all markets. There is an account below of the numerous measures of intervention that Smith favored. It should give pause to the advocates of a market economy who invoke the authority of Smith to support their advocacy. There are better arguments for it. But this should not please the opponents of the market. The exceptions Smith took to it cannot be brought together in a systematic and convincing statement that argues against it. Particular exceptions can be used and have been. In the extended debate from 1815 to 1846 over the British Corn Laws, the protectionists cited Smith's statement that there should be a duty on an imported good that competed with a domestically produced good subject to a tax. The protectionists were defeated, and the laws were repealed. A victory for free trade and a defeat for a free trader?

I should like to propose a way to get things straight about Smith or anyone else. It is to begin by distinguishing between (*a*) what the author actually said, (*b*) what is implied by what he said, (*c*) what can reasonably be inferred from it, (*d*) what we may conjecture he meant, (*e*) what he conceivably could have meant, and (*f*) what it would be convenient to believe he meant. The next step is to stay as close as possible to points *a* and *b*, to know that about point *c* the operative word is "reasonably," and to move as far as point *d* only when all else fails or never at all. Distinctions *e* and *f* are left to those who, to paraphrase George Stigler, make the study of the history of economic ideas a work of the imagination.

These are steps along the straight and narrow, and they lead to the Grand Rule, grand in purpose, grand in simplicity: Get it right or leave it out. A counsel of perfection, possibly, and one this paper may not itself satisfy despite the effort to make it do so. Those who do not care for the counsel have excused themselves by saying that the celebrated words of a celebrated man often are used to mean something different from what he meant by them. Just so. But would not the reader be better served if he were placed on the alert and told, "Consider how the market is guided by 'an invisible hand,' to use the celebrated words of Adam Smith, although he himself did not use them that way and believed the market needed some guidance"?

In the *Wealth of Nations,* Smith writes of an invisible hand in the course of describing a particular condition that may or may not be present in a transaction on a competitive market. The condition is that in which a man who intends to benefit only himself in a particular way may, in the act of procuring that benefit, produce a benefit of a different kind for everyone including himself. A merchant who instead of engaging in foreign trade engages in domestic trade—where his capital is more secure and no less profitable—contributes to the defense of the nation. He does so because he adds to domestic capital; it is a source of military power, and that power is a benefit to everyone including the merchant. This interpretation of the invisible hand is explained in Section II where the passage in which Smith uses the celebrated words is given at length.

There is also an invisible hand in the *Theory of Moral Sentiments,* where it means something different, and there is another in the *Essay on Astronomy* where it has still another meaning. That meaning is repeated in the *Essay on Physics* and is assigned to ''invisible beings.'' The hands and the being which are outside of the *Wealth of Nations* are described in Section III. The invisible hand of the *Theory of Moral Sentiments* is little noticed. Neither is the book itself, although the readers it presently has are earnest and ingenious. The invisible hand and being of the essays are rarely noticed. Not so the invisible hand of the *Wealth of Nations.* It has received its full measure of attention and more. There are nine different interpretations of it that I have seen (which cannot be all of them), and there is a tenth. I would call it my own if I believed, as I cannot, that it never has occurred to anyone else since 1776.

I

About the other nine.

1. The most common seems to be that the invisible hand is the feature or property of the market that makes the self-seeking of each person work to the benefit of others as well as of himself, ''others'' being variously indicated as society, the public, everyone, other people, or just someone else. This interpretation implies Smith believed that a society of self-interested people who conducted their economic affairs on the market would be a society that is mutually beneficial, prosperous, and harmonious (Cropsey 1979, p. 173; Sugden 1986, p. 2).

Neither the interpretation nor what it implies is warranted by what Smith said. He did, to be sure, say the self-seeking of men could increase the wealth of the nation and in so doing could contribute to defense, a contribution that is in the public interest, and he said this in the chapter that describes the invisible hand. But he also said, in the same chapter, that self-seeking adds to the wealth of the nation only if it is done in competitive markets and that the public benefits only when the additional wealth is kept within the country.

These two conditions are not always present. Moreover, according to Smith, men do not always act in their own interest. They can be mistaken about what it is (as when they are not as thrifty as they should be). When they know their interest they can be mistaken about what will best serve it (as when they overestimate the chance of success in an occupation). Or they may not consult their interest at all (as when the pursuit of pleasure drives them to ruin) (*Wealth of Nations,* pp. 346, 123, 907).

In summary, Smith did not say that a man who acts in his own interest is led by an invisible hand to act also in the interest of others. Nevertheless, the notion that he did say this is held by many, and some are in high places. The editors of *The New Palgrave Dictionary* *of Economics,* in the introduction to their collection of articles that are related to the invisible hand and published separately under that title (Eatwell, Milgate, and Newman 1989, p. xi), say this (some of it in their words, some in the words of Smith):

> Although he mentioned it only twice, Adam Smith introduced into the language of economics a metaphor as powerful as any used before or since: the invisible hand. The meaning that Smith imparted to the phrase remains much the same today. Every individual, acting solely in the pursuit of private gain, is ''led by an invisible hand to promote an end which was no part of his intention'' (*Wealth of Nations,* 1776, Book IV, Part II), that end being ''the publick interest.''

The reader is invited to contrast this with the passage from the *Wealth of Nations* that is in Section II below (entirely in Smith's own words of course).

The Palgrave collection includes, most suitably, the article on the ''Invisible Hand'' from the *Dictionary* itself (Vaughan 1987), and the meaning that article assigns to the idea (which is interpretation 3 below) does not agree with what the editors of the collection say or with what Smith said or with what in the *Dictionary* entry on Smith is said to be the meaning of the invisible hand (which comes within interpretation 2) (Skinner 1987, 4:365).

2. An interpretation almost as common as the preceding but considerably refined is that the invisible hand is the price mechanism, a force that brings all markets together into a state of grand harmony, or general equilibrium, and directs the economy in a way that maximizes the wealth of the nation (Grampp 1948, p. 334; Gordon 1968, 8:548; Hahn 1982; Coase 1994, pp. 82–83).

Smith did say a buyer and a seller, each acting for himself and himself alone, come together to exchange on terms that are satisfactory to both (*Wealth of Nations,* pp. 26–27). That implies an equilibrium condition of course. Whether or not it is a condition that maximizes wealth is another matter. It is if the buyer and seller exchange on a competitive market and it is not if they restrict trade. So the fact that self-interested behavior eventuates in a price mechanism is not evidence that the behavior is in ''the public interest,'' which, in the passage about the invisible hand (hundreds of pages away), means an increase in the domestic wealth of the nation. Still, the idea that voluntary transactions bring about mutually satisfactory results does imply markets can guide themselves. That implication is made explicit in Smith's explanation of how market prices adjust themselves to natural (long-run equilibrium) prices. This, in turn, implies markets do not have to be controlled by government. That implication is made explicit in Smith's explanation of why laws against forestalling and engrossing are either useless or mischievous (pp. 74, 532–34).

However, these ideas about the price mechanism (none of which Smith held in an unqualified form) have nothing to do with the invisible hand. It is self-interest operating in the fortunate circumstance in which a merchant finds that keeping his capital at home is profitable, the consequence of which is to increase the ability of the nation to defend its people (including the merchant). That is different from what directs markets. There each man knows that if he is to get what he wants he must pay what is asked. He may not be aware that he is participating in the optimal allocation of resources and distribution of output and that he is one among the many who are doing their bit to demonstrate the First Fundamental Theorem of Welfare Economics: if all individuals and firms are price takers, competitive equilibrium is Pareto optimal. The theorem is said to ''trace back'' to the invisible hand (Feldman 1987, 4:889). It does not but does trace to other of Smith's ideas about markets.

3. The Neo-Austrians interpret the invisible hand as a ''metaphor'' for ''the principle by which a beneficial social order emerged as the unintended consequence of individal human actions'' (Vaughan 1987, 2:997). This resembles the preceding interpretation, the invisible hand as the price mechanism. But it is not altogether the same if, in addition to offering a teleology of the market, it means the invisible hand also explains how a social order can originate and take form from the behavior of individuals acting independently of each other and without any intention of creating a relationship among themselves that is to the advantage of all of them.

How Smith's conception of the economy resembles and how it differs from that of Ludwig von Mises, Friedrich von Hayek, and others of that school is an interesting question. Inquiry into it could have the unexpected consequence of revealing that Smith was not as loyal to the simple system of natural liberty as the Austrians are. However that may be, the inquiry is not likely to reveal any connection between the invisible hand and the idea that the market comes into being as the unintended and unexpected consequence of the independent behavior of people. True, the invisible hand does have a consequence that is unintended, but the consequence is not a beneficial social order. It is a benefit that, while important, is of a lesser order. It is to contribute to the defense of the nation. It is nothing so complex and so grand as the social order or the price mechanism within it.

The second and third interpretations come together in the new theory of the firm. The result is an example of how a misunderstanding of the invisible hand can bring in its wake a misunderstanding of other ideas of Smith, in this instance his idea, or bundle of ideas, about the market. A cardinal feature of the new theory is that the market cannot do everything. If it could there would be no firms. But there are firms. Smith, according to one statement of the theory, did not recognize the division of authority between the firm and the market and believed the market could do all (Williamson 1994). He did not, actually, as a reading of what he said about it makes plain. Indeed, he did not believe the market could do as much as the new theory of the firm says it can do.

4. Then there is the assertion, expressed clearly, forcefully, and with total conviction, that the invisible hand is competition and as such is a power for good because competition is good. It compels people (coerces them, actually) to use their resources wisely, their income sensibly, and, by so doing, to promote the public interest. Of this, it is asserted, ''there is absolutely no question'' (Rosenberg 1979, p. 24).

Smith did not in fact say the invisible hand is competition. Neither did he imply it. He did say competition is the friend of good management; he said monopoly is the foe of parsimony; and he said parsimony is the immediate cause of an increase of the capital stock (*Wealth of Nations,* pp. 163–64, 612, 337). But he did not say these things in the course of describing the invisible hand and he did not say the invisible hand is present in all competitive markets or in all conduct that is directed by self-interest. The invisible hand guides a merchant only when circumstances induce him to keep his capital at home. To be noticed as well is Smith's belief that competition, while it can do much, cannot do everything, cannot, for example, provide for the defense of the nation. That he said ''defense . . . is of much more importance than opulence'' there truly can be no question (pp. 464–65).

5. There is the no-nonsense view, far down the conceptual and linguistic ladder, that the invisible hand is simply the mutual advantage there is in exchange (Knight 1947, p. 377).

The view is understandable. Smith did say exchange yields a benefit to both buyers and sellers as did a number of writers before him, Cicero among them (from whom Smith could have and may have also gotten an idea or two about the benefits of the division of labor and of material welfare) (Cicero 44 BC, ii, 3, 4; North 1691, p. 13; *Wealth of Nations,* pp. 26–27). They did not attribute the benefit to an invisible power. Nor did Smith. He attributed it to the wisdom that is common to men. They know the butcher and the baker do not act out of benevolence when they provide the necessaries of life. But the wisdom is not dispensed by an invisible hand and has no place in Smith's account of it.

6. A novel and recent view is that the invisible hand is not a beneficial force at all and that it did not have a favorable connotation for Smith. The invisible hand may have been meant as a joke (Rothschild 1994).

The interpretation is unusual because it draws for support on the three writings in which Smith used the words and because it claims that what the term means in any one of them is consistent with what it means in the others (the risible hand). The interpretation is certainly correct in saying the invisible hand has a pejorative connotation in the *Essay on Astronomy*. But that cannot be said about its meaning in the *Theory of Moral Sentiments*. There, even though it is associated with behavior of which Smith disapproves, it meliorates that behavior. Moreover, the two works are quite different from the *Wealth of Nations,* as well as from each other, and there are no grounds for imputing the meaning in either of them to that in the *Wealth of Nations,* where it has a favorable connotation (along with the self-interest in which it has its origin).

7. Another novel and recent interpretation is that the invisible hand is the process by which men acquire the knowledge, skills, and habits that guide them in buying and selling, the consequence being that they maximize their wealth and presumably that of the nation as well. This interpretation comes from evolutionary psychology (Cosmides and Tooby 1994).

This view assigns a beneficial quality to the invisible hand, and that of course is what Smith said it has. He also said that behavior directed by self-interest could be efficient and in the public interest. He said moreover that the division of labor, ''from which so many advantages are derived, evolved slowly as the consequence of the propensity to truck, barter, and exchange'' (*Wealth of Nations,* p. 25). All of this is consistent with the interpretation. But Smith also said the propensity might be a natural endowment or, more probably, the product of the faculty of reasoning, and that implies it is not behavior which undergoes evolutionary development.

What tells even more against this interpretation is that Smith nowhere says the invisible hand is the outcome of an evolutionary process; nor does he say anything from which such an interpretation can be inferred. This is not to say there is no factual basis for the statement that market skills evolve over time and as they do markets become more efficient, resources are used more productively, and income is spent more effectively. These things may be quite true.

But they have nothing to do with the invisible hand of the *Wealth of Nations* (or that of other of Smith's writings).

8. At the upper reach of the conceptual scale there is the interpretation of the invisible hand as the prime mover, *fons et origo,* omniscient monitor, or final cause of economic and all behavior. The four are not conceptually the same, of course, but are used here as if they were and to mean the invisible hand is a beneficent power beyond the will of man—a providential force that is a part of the natural order (Viner 1927, p. 207; 1968, 14:324; Spiegel 1979; Evensky 1993).

The interpretation resembles, in some ways, what the invisible hand actually is in the *Theory of Moral Sentiments.* To make it this in the *Wealth of Nations* calls for a suspension of belief or for ignoring what Jacob Viner called "a substantial measure of irreconcilable divergence" between the two books. In the *Wealth of Nations* the invisible hand leads to a beneficial outcome, as this interpretation quite correctly states, but it does so only in particular circumstances. To believe this means the invisible hand is a providential force calls for assuming, first, that providence has made men self-interested (endowed perhaps with the propensity to truck and barter) and, second, that self-interested behavior is always beneficial. If Smith believed the first assumption when he wrote the *Wealth of Nations,* he kept it to himself. That he did not make the second is clear from the account he gives of behavior—self-interested and other—that is not in the public interest. The great difference between the invisible hand of the *Theory of Moral Sentiments* and of the *Wealth of Nations* is described in Section III.

9. The invisible hand is a force that contributes to the security of the nation by retarding the export of capital. So runs this, the ninth and the most interesting of the interpretations (Persky 1989). It is so for these reasons: (i) It begins with the passage in the *Wealth of Nations* in which Smith actually uses the words. (ii) It notices what the invisible hand specifically does, which is to reduce the export of capital. (iii) It relates the geographic allocation of wealth—between what is held at home and what is held abroad—to the importance Smith placed on domestic employment and output, a matter of considerable consequence as explained in Section II of this paper. (iv) It notices that what Smith said about the invisible hand was meant to answer an anticipated objection to free trade. (v) Finally, because one is grateful for small gifts as well as large, it calls the invisible hand a simile (which Webster and Fowler give us reason to think it could be) instead of calling it a metaphor as others have done so often as to make one sigh and sink.

Yet for all of its merit, the interpretation is incomplete. It does not explain the ''security'' the invisible hand provides. Is the capital it keeps at home more advantageous to the nation than capital that is exported because more capital at home means more employment at home? Smith says that. But what does this signify: that domestic employment is the objective of policy and that other objectives are subordinate to it? Hardly, since Smith's statement is made in a chapter that advocates free trade. What then did he mean by ''security''? The plausible answer, as argued below, is that capital at home, being safer than capital abroad, is a resource on which the nation can draw for its defense.

In sum, the invisible hand has been interpreted to mean: (1) the force that makes the interest of one the interest of others, (2) the price mechanism, (3) a figure for the idea of unintended consequences, (4) competition, (5) the mutual advantage in exchange, (6) a joke, (7) an evolutionary process, (8) providence, and (9) the force that restrains the export of capital.

II

Consider now what Smith himself said about it—his ''interpretation.'' Consider the passage in the *Wealth of Nations* in which he expressly wrote about the invisible hand and consider also the relation of what he said there to what in other passages he said about the wealth of the nation, about defense, and about the way self-interest affects the two.

There is only one reference to the invisible hand in the *Wealth of Nations.* It is in chapter ii (''Of Restraints upon the Importation from Foreign Countries of Such Goods as Can Be Produced at Home'') of book IV (''Of Systems of Political Oeconomy''). The setting of the invisible hand, the circumstance in which it is present, is the fortuitous and fortunate consistency there can be, but not always is, between the particular interest of one person and the quite different but compatible interest of everyone. A merchant makes a transaction that increases his wealth, that being in his interest obviously, and the transaction does not reduce the wealth of others, but in all likelihood increases it, that being in their interest. He keeps his additional capital at home, and that is in the interest of everyone including the merchant himself. The reason why that is in the interest of everyone is that domestic wealth is a resource on which the nation can draw to defend itself. The fact that the merchant in serving himself in one way serves everyone, including himself, in another way is something he had no intention of doing and was not aware of doing.

In the language of today's economics, defense is a public good and depends, in part, on the stock of domestic capital. There are certain transactions that increase that stock. The increase is a positive externality which the transactions yield, and it contributes to the actual or potential quantity of the public good. The people who engage in such transactions do not intend to contribute to defense and do not know they do. Nevertheless they do. Their conduct shows that what is good for one person in one way can be good for everyone in another way. The invisible hand then is self-interest operating in this circumstance, the circumstance in which a private transaction yields a positive externality that augments a public good.

This interpretation incorporates four ideas of Smith: (1) Defense is an objective of economic policy, which means that a measure of policy must not be judged by its effect on wealth alone. (2) Wealth is one of the resources on which the nation draws in order to defend itself (its men, their skills, and their martial spirit being the others), and the amount of its wealth that is held domestically is more secure, hence is more important for defense, than the wealth that is held abroad. (3) The acquisitive behavior of individuals may contribute to defense if that behavior is competitive and only if it is. (4) People who engage in acquisitive and competitive behavior do not intend to benefit everyone, nor do they know they do.

The evidence that Smith held these ideas and an explanation of them follow.

1. That he believed defense should be an objective of economic policy he made clear when he said the government should encourage—by protective duties, regulation, and possibly by bounties and premiums—the manufacture of goods needed for defense such as gunpowder and sailcloth. He also made the point clear when he said the government should increase the size of the merchant marine by protective duties and other measures that reduce the competition of foreign shipping. He made himself as clear as possible when he justified the Navigation Acts. He acknowledged they reduced efficiency, hence made the national wealth less than it otherwise would be, yet (he said) they were among the wisest measures of policy ever enacted because "defense . . . is of much more importance than opulence." He said this in the chapter that describes the invisible hand (*Wealth of Nations,* pp. 463, 523, 464–65).

2. That defense depends on the wealth of the nation Smith implied when he said that "the great expense of fire arms gives an evident advantage to the nation which can best afford that expense" (p. 708). This is said in chapter 1 of book V, which is about the three major functions of government: defense, justice, and public works (the first of which is described at greater length than the others). The description, there and elsewhere, reveals his considerable

knowledge of military history, together with his keen interest in military affairs, military men, and the martial spirit—an interest, one gathers from the recent biography, although it does not expressly say so, that made him behave like a field marshal *manqué* and a man with a bee in his bonnet about the martial spirit (Ross 1995, pp. 316–17). His particular worry, or one of them, was that the lower orders were lacking in it; another was that the middling orders did not have as much as they should. He advocated that both be trained, each in its own way, so that each would acquire the courage and spirit that are appropriate to a man (*Wealth of Nations*, pp. 787–88). A piece of drollery about this side of Smith is the comment he made on the subsidy given to the theater of ancient Greece. He disparaged it, not because it supported an activity that should support itself, but because it paid men more to attend the theater than to serve in the army.

In his account of the invisible hand Smith emphasized the domestic as distinct from the total stock of wealth and did so because he believed defense depended mainly on the domestic stock. Yet free trade, the impartial reader would (correctly) suppose, implies the free movement of capital and the export of some of it. The danger of capital's being exported (if it is a danger) is unfounded, he says. The invisible hand keeps it at home. That is the beneficial end it promotes and is the only end he explicitly names. What the others are, if there are others, is not stated. He said the individual who uses his capital in domestic, competitive trade rather than in foreign trade and uses it in the most profitable way "is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention" (p. 456).

Does the word "cases" mean there are transactions, other than placing capital in competitive domestic trade, that add to domestic wealth and to defense? Or does "cases" mean that transactions that place capital in domestic trade contribute to something other than defense, for example, to what he calls elsewhere the "greatness" of the nation? Or does the word have all three meanings?

Smith, in his observation about firearms, made no distinction between wealth held at home and wealth held abroad. One would suppose that British assets held in foreign countries could be of military value to Britain. They could in fact have that value, Smith said elsewhere in a passage that disparaged the mercantilists and their belief that a favorable balance of trade has military value because it induces an inflow of specie that can be used in time of war. Wrong, Smith said. If specie is needed for military purposes it can be obtained by an export surplus. That of course is what a favorable balance of trade is and is just what the mercantilists meant. The inconsistency is one of several mistakes Smith made in writing about the mercantilists; the largest and probably the least recognized was to say they believed money was wealth (pp. 440–41).

As Smith called particular attention to the domestic portion of the wealth of the nation, so he did to the domestic portion of employment, industry, and trade, each of which is related to defense. Why the domestic portions were important he explained or indicated in several ways. Capital that is kept at home is more secure than capital that is sent abroad and held there. He did not say, but one reasonably may infer, that domestic capital is more ''secure'' in the sense that it can more surely be called on to support defense than can capital held abroad. He expressly said domestic ''industry . . . necessary for the defense of the country'' should be ''encouraged.'' The most secure of all capital is land, he said. It is unlike the capital of a merchant which can be moved from place to place and sent abroad as he wishes. Domestic trade is superior to foreign because domestic trade gives twice the encouragement to industry that foreign trade gives and also receives its returns more quickly (pp. 463, 377–78, 426, 368). That employment itself is important is self-evident since it, along with the capital stock, determines the wealth of the nation. Why Smith made domestic employment the center of his attention must be left to inference. Mine is simply that the men of Britain who are working in Britain could with less difficulty be called on to defend it than the British who lived abroad (as the American Revolution demonstrated).

3. That the acquisitive behavior of men adds to the national wealth only when they act competitively is implied by Smith in his statement (again in the chapter that refers to the invisible hand) that what adds to the capital of one person or one trade does not add to the capital of the nation if the market in which capital increases is a market that is protected from foreign competition (p. 453).

4. That a man who accumulates capital may, without knowing or intending to, act in ''the public interest'' (for which one may read ''defense'') is an idea Smith adumbrates at the beginning of the celebrated chapter and brings into full light a few pages on, where he writes of the man, his capital, and the invisible hand:

> But the annual revenue of every society is always precisely equal to the exchangeable value of the whole annual produce of its industry, or rather is precisely the same thing with that exchangeable value. As every individual, therefore, endeavors as much as he can both to employ his capital in the support of domestick industry and so to direct that industry that its produce may be of the greatest value;

> every individual necessarily labors to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the publick interest, nor knows how much he is promoting it. By preferring the support of domestick 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. I have never known much good done by those who affected to trade for the publick good. It is an affectation, indeed, not very common among merchants, and very few words need be employed in dissuading them from it. [P. 456]

At this point the thoughtful reader may demur and wonder if what Smith said about the invisible hand can reasonably be interpreted to mean it promotes defense. He does not use the word defense; what he expressly says is that the invisible hand increases domestic capital.

The question is asked by an anonymous and learned referee of this paper who says an argument can be made that the invisible hand is primarily about the accumulation of domestic capital, not about defense, although (he continues) what is favorable to domestic capital would also, in Smith's view, be favorable to defense. Consistent with this argument, as the referee properly observes, is that Smith, a paragraph or two before he referred to the invisible hand, summarized what he had explained at length in his chapter on capital, namely that domestic trade, because it adds more to domestic capital and employment, is superior to foreign trade.

However, there is more. Smith, in the earlier paragraph, did not attribute the increase in domestic capital and employment to the invisible hand but to simple self-interest, unguided and unassisted. The decision of a man to keep his capital at home rather than abroad has economic consequences with which the man could not be unaware. He knows he will employ more workers at home than he would if he sent his capital abroad and he knows that more will be produced at home because his capital is there. What he does not know, according to Smith, is that by doing what he does he may add to the nation's power.

In the chapter on capital, Smith said ''the riches, and so far as power depends on riches, the power of every country, must be in proportion to its annual produce.'' He continues: ''the great object of the political oeconomy of every country, is to encrease the riches and the power of that country.'' He did not say that power depends only on the riches that a country keeps at home, but he did clearly imply that riches at home were a more secure source of power than riches held abroad (p. 426).

The riches of the nation, then, are the product of self-conscious, self-interested effort. The power of the nation, including its military power, is a consequence, unintended but fortunate, of this effort and is the work of the invisible hand.

That is not all. The chapter on capital is polemical and argues against the fostering of exports by subsidies or other means. No need to, Smith said. Merchants will engage in foreign trade when it is more profitable than domestic trade, and the latter (he is at pains to show) has its advantages. They are so considerable that the reader might wonder whether domestic trade should be fostered. That would be a perverse conclusion to draw from the discourse of a free trader. The merchant, when in competition with others, will place his capital where it adds most to the nation's wealth, and he does not have to be told where that is. He will keep it at home as long as it is as profitable as it would be abroad. At home it yields benefits it does not yield if it is away, and they are nicely explained in the chapter. It advises the reader to appreciate the merits of domestic trade. When he reaches the chapter on the invisible hand, he is assured domestic trade will not be jeopardized by foreign trade.

In that chapter, there are what in the language of Smith's day were called curious and interesting particulars. Some are posers, to use the language of a later day, or, in today's language, are anomalies. The chapter, on the face of it, is an argument for abolishing import duties that give domestic producers a monopoly of the home market, that is, an argument against prohibitive duties. It says little about duties that are not prohibitive, but they too would be excluded by the principle on which the chapter is grounded, namely, that buying where price is lowest is as sensible a practice for an entire people as it is for any one of them. Duties for revenue are another matter and have no place in the chapter.

Smith, in making his argument, considers one by one the objections that might be brought against it. They had in fact often been made. He shows he could reason closely and sharply when he chose, a facility that is not as obvious in his writing as in that of Ricardo, whose way of thinking is more congenial to an analytical economist than Smith's is. Even more, the chapter shows a fondness for rhetoric or the skills that win an argument without settling an issue and do so by persuading instead of by convincing (a distinction Frank Knight urged on economists but with so little effect that they use the words as synonyms). Smith's fondness for rhetoric is not surprising. It was his first interest, and he cultivated it for some years before he took up economics.

He considers objections of three kinds, replies to each, and offers such reassurances as he can about some; and about those he cannot he is candid or disingenuous as the case may be.

One set of objections has to do with the losses that free trade would impose on certain activities. Agriculture is vulnerable, and especially so are the cultivation of grain and the raising of cattle. Thus an objector would claim. Smith replies, and his reply must have been strange to anyone of the time who was familiar with the controversy over trade policy. Smith said the domestic price of grain exceeded the foreign price by less than the cost of shipping the foreign grain to Britain, and he concluded—to the surprise of his readers, one would think, whether they favored free trade or not—that the duty on grain did *not* protect British farmers. They only think it does, and their delusion makes them favor it. They have succumbed to the delusion because they have turned away from the generosity that is natural to their position and have acquired the mean spirit of monopoly they observe in merchants and manufacturers (that being their natural disposition presumably). Farmers, Smith said, have nothing to fear from the freest importation of grain, and he cited "the very well informed author" of a contemporary work who reported the average annual quantity of corn imported was less than two-tenths of one percent (.175) of the average annual consumption.

The citation merits attention. It is *Three Tracts on the Corn Trade and Corn Laws* (1766) by one Charles Smith. The average (which he expressed as 1/571) pertained to the 68 years from 1697 to 1764. It is computed from the quantity, not the value, of four kinds of corn (barley, oats, rye, and wheat), each of which had a different price. Had the total value of each that was imported been expressed as a ratio to the value of each consumed each year and a weighted average for the entire period computed, the aggregate ratio might have been different from 1/571. This, Charles Smith did not do, and it cannot be done now since he reported only the price of wheat. A more important reservation about his data is the variance of imports during the 68 years. In six of them, the import of wheat was between 30 and 3,000 percent greater than the average import of wheat and was between 0.14 and 3.4 percent of annual consumption, while for the entire period the import of wheat was 0.11 percent of its annual consumption. These figures are not large, admittedly. But they, along with the fluctuations in price, were large enough to convince Charles that the import duties, the export bounties, and certain other regulations should be maintained, not all of them in their present form, he said, but in some form or other. This was not mentioned by Adam in his compliment to Charles. Adam also said nothing about the duty on corn being itself a reason why the import of corn was small. The well-informed Charles did have some things to say, and he listed 20 pieces of legislation enacted between 1698 and 1766 that affected the corn trade. To them must be added those that were in effect before 1698 and continued to be (Charles Smith 1766, pp. 145, 144, 120–24, 44–45).

If (Adam) Smith truly believed agriculture did not benefit from protective duties, he could not have objected to them. But he did. On the next page he warned that ''to prohibit by a perpetual law the importation of foreign corn and cattle'' is to limit the population and industry of the nation. He continued, shrewdly, that a limit on the import of cattle reduces the amount of grain that can be grown because the limit, by raising the price of lean cattle, makes land more valuable for grazing and less valuable for cultivation. Here economics displaced rhetoric and took charge of the argument.

The two come together and mingle, or tangle, a few sentences later, where Smith argues against the bounty on the export of grain. It reduces the domestic inventory of grain, he says, and so causes the price to rise higher than it otherwise would when the domestic crop is smaller than usual. The higher price induces an increase of imports and reduces the market share of domestic producers.

The economic reasoning is unobjectionable. But since it emphasizes the fact that the bounty makes the import duty less protective, it is not what one expects in an argument for free trade. Moreover, Smith has just said British farmers do not need protection because their costs protect them. Still, could there have been among them some who were unpersuaded and wanted more protection, and could Smith have been telling them they could secure it by eliminating the bounty (the elimination being an act of which he, as a free trader, would approve)? Perish the thought! It is a conjecture disguised as a question. What he did say was that the bounty was a measure favored by merchants and shippers of grain, a class of men to be scorned for their mean spirit of monopoly, a spirit alien to the natural generosity of country gentlemen.

In addressing the second set of objections, Smith employs economics in much of what he says and rhetoric much less. The objections are that free trade in one way or another will reduce employment. He acknowledges that protection will increase employment in the protected industry because it will increase capital there. But, he continues, capital elsewhere in the economy will be less than it could be, and (by implication) the loss will be greater than the gain; hence the wealth of the nation is less with protection than with free trade. About the effect of removing protection, as distinct from imposing it, he acknowledges that employment will decrease. But, he continues, the economy is remarkably adaptable, and the unemployed will be drawn to other jobs, this having been shown by the rapid reemployment of men discharged after the ''late war'' (probably the war between Britain and France, which ended in 1763), an adjustment that was all the more remarkable, he says, because the men left the army without the skills and habits of work of civilian laborers. Moreover (and here the rhetoric returns), protection can be removed slowly in order to give the unemployed time to find a new use for their labor. Why, one asks, should protection be removed slowly if the economy was able to absorb discharged soldiers quickly? (Perhaps the answer is that the additional reassurance was meant for readers who missed the initial reassurance, but that is another conjecture!)

The third set of objections has to do with capital, and one of them is anticipated in the second set, namely, that free trade, because it will reduce employment, will reduce the wealth of the nation. Another objection, and one that is more interesting because it is relevant to the invisible hand, is that free trade will cause capital to leave the country.

Smith offers his reassurance about domestic capital and in doing so uses the celebrated words. What he says about capital exports is the strongest evidence I can offer in support of my interpretation of the invisible hand.

Wholesale merchants, he says, are inclined to keep their capital at home and will do so ''upon equal or nearly equal profits.'' And a good thing that is, he continues. They do not do so for the reason Smith himself believes capital at home is more ''valuable''—because it contributes more to defense when it is at home. Presumably the public he is addressing believes as merchants do. Does it also believe, when it has reached this chapter, that the benefits of domestic trade, of which it has been told, are so great they must not be put at risk by the competition of foreign trade?

The reassurance continues. A merchant who despite his uneasiness engages in foreign ventures does not overcome it entirely. Consider the Dutch trader (Smith asks us) who buys wine in Lisbon, sells it in Königsberg, and there buys grain to sell in Lisbon. His capital seems to have no place in the domestic wealth of the Netherlands.

Yet it does. The trader intercepts the cargoes on their way from one port to the other, has them unloaded and reloaded in Amsterdam, as expensive as that is, and Amsterdam becomes an emporium. The goods while they await reloading are a part of the nation's domestic stock of capital. Does Smith want us to believe that with free trade London would become an emporium?

Actually, no. Nor are we being told the invisible hand is an expression of the unease of nervy merchants, the consequence of their being risk averse. Smith inserts a critical qualification in his account. It is that merchants will keep their capital at home ''upon equal or nearly equal profits.''

Could the idea of the invisible hand be made more plausible by supposing Smith meant the rate of profit in foreign trade contains a risk premium in excess of the risk premium in the domestic rate? That would mean self-interest prevents the export of capital when the foreign rate exceeds the domestic rate by less than the difference in the two premia. Alas, this can be no more than a transitory condition except if we assume, as Smith certainly does not, either in this chapter or in others, that there are no differences in the cost of producing goods at home and abroad, an assumption that would make foreign trade pointless. He did, to be sure, tell the grain farmers their cost was low enough to protect them from foreign competition; but he did not say this about all goods and about grain itself he contradicted the statement on another page.

What he said about the rate of profit at home and abroad implies that the invisible hand, while limiting the export of capital, does not prevent it. The implication is made explicit in another chapter, that in book III, where the topic is the effect of foreign commerce on the cultivation and improvement of the nation (in today's language, the effect of foreign trade on the capital value of domestic agriculture). There Smith said capital which is in foreign trade—and that in domestic manufactures also—is ''a very precarious and uncertain possession,'' by which he meant the possession of the nation as distinct from the possession (or private property) of the traders and manufacturers. The statement is another illustration of the idea that the wealth of the nation, while it is the sum of the wealth of individuals, and so confers a benefit on those who own it, also confers a benefit on everyone, that benefit being defense.

The reason why capital in domestic manufacturing and trade is of uncertain value in the defense of the nation is that such capital, unlike that in agriculture, can be exported and will be if the owner feels no more than ''a very trifling disgust'' (*Wealth of Nations,* p. 426). That can be interpreted to mean people in manufacturing and trade are temperamental or capricious. Or (what I find plausible) it can mean a ''trifling'' dissatisfaction with the rate of return at home.

The invisible hand, then, is not an autonomous force. It is self-interest operating in particular circumstances. The owner of capital acts in the public interest if acting in his private interest is profitable and happens to provide a public benefit. He does not act in the public interest if acting in his own interest would be unprofitable.

There are circumstances of the opposite kind, when what is in his interest is not in the public interest. They are not rare, and although they vary in importance, none is trivial. They are significant because they are information about Smith's conception of the market and about his ideas of economic policy. In the *Wealth of Nations* and in the *Lectures on Jurisprudence* there are (depending on how finely one makes distinctions) some 35 or 40 measures of government intervention of which Smith approved or which he advocated. They are of five kinds. The most numerous have to do with helping buyers, sellers, and people in need of help of one kind or another. Examples are taxing spirits more than beer, in order to reduce the consumption of alcohol, and fixing the price of food if the seller is a monopolist. The next most numerous are meant to increase efficiency by regulating or replacing certain markets. Examples are the granting of temporary monopoly rights and prohibiting the engrossing of land in the colonies. A third group consists of taxes that are meant to redistribute income (as those on house rents) or to redirect the use of resources (as those on the rent of land which must be used as the owner specifies). The fourth restricts foreign trade, and the most important measures are those that contribute to defense. The last regulates the issue of currency and other financial transactions, an example being the law that declared no paper currency issued in the American colonies could be legal tender. In another study, I have described the forms of intervention that Smith favored (Grampp 1993, pp. 74–79).

They run counter to the simple system of natural liberty, which he advocated and for which he is well remembered, so well that the exceptions he made to it are either overlooked or dismissed as of no importance, mere niggling or bandaids on the robust body of competition. Actually the exceptions are important; Smith said they were; and he acknowledged they modified the simple system. That surely is the conclusion a disinterested reader would come to. However, he is not likely to be certain of how the exceptions are to be reconciled with the system. A few conceivably can be as measures that foster public goods, but many are elusive.

The effort to reconcile the diverse ideas is the greatest of the efforts a reader must make in order to understand the *Wealth of Na-*

tions, greater certainly than the effort needed to understand a particular idea when it is taken by itself. This is notably, but not exclusively, true of the collection of ideas that comprise what Smith says about economic policy. Moreover, the way he says it compounds the difficulty. In a single paragraph of fewer than 200 words he says of a particular measure (one prohibiting the issue of paper money in small denominations) that it is ''a manifest violation of natural liberty,'' the protection of which should be the purpose of government. But the next sentence reduces the ''manifest violation'' to what ''may be considered as in some respect a violation,'' after which the reader is informed that the natural liberty of a few must not be allowed to endanger the many, that being a principle which should be followed by every government whether it is free or despotic (*Wealth of Nations*, p. 324). Thus a discourse that began by invoking a grand principle comes to an end with a commonplace that contradicts it, yet both are expressed with heat and conviction.

III

What I believe the invisible hand means in the *Wealth of Nations* is taken from what Smith said there and not from the way he used the words in his other writings. He first used them in (to give its full and informative title) ''The Principles Which Lead and Direct Philosophical Enquiries; Illustrated by the History of Astronomy,'' which was written before 1758. He describes the mind of savage man and what it makes of there being both regular and irregular events in nature. The regular events are attributed to the natural property of things: ''Fire burns, water refreshes, etc.'' The irregular events are attributed to the gods: an abundant harvest to the pleasure of Ceres, a poor harvest to her displeasure, and thunder and lightning to ''the invisible hand of Jupiter'' (1982, pp. 49–50).

This kind of thinking, Smith says, is the origin of polytheism and of ''that vulgar superstition which ascribes all irregular events of nature to the favor or displeasure of intelligent, though invisible beings.'' He makes the same observation in ''The Principles Which Lead and Direct Philosophical Enquiries; Illustrated by the History of the Ancient Physics,'' which may have been written before 1755, and here he is derisive about the mind of savage men. ''Their ignorance, and confusion of thought, necessarily give birth to that pusillanimous superstition, which ascribes almost every unexpected event, to the arbitrary will of some designing though invisible beings, who produced it for some private and particular purpose'' (1982, pp. 112–13).

The invisible hand of the *Essays* is remote from that of the *Wealth* *of Nations* and also from that of the *Theory of Moral Sentiments.* The three present a pretty puzzle to readers who would like to make the ideas of Smith consistent, an honor he was not sure he merited. In a letter to Hume in 1773, he referred to the *Essay on Astronomy* as a ''fragment of an intended juvenile work,'' which Hume, if he survived Smith, might or might not think was worth publishing. A distinguished scholar has acknowledged that Smith after writing the *Essays* changed the invisible hand from a power that accounts for irregularities in nature to one that accounts for regularities, but he maintains Smith did not change his belief that there is a natural order which governs the affairs of men (the simple system of natural liberty), a belief which makes his writings consistent. That he used ''an invisible hand'' in contradictory ways is explained by his fondness for ''pithy and forceful phrases'' (Macfie 1971, pp. 596, 598).

Smith was, one notices, fond of the sound of his voice (and had reason to be), and when he reached the end of a paragraph he could forget how he began it. But neither rhetoric nor forgetfulness can explain the inconsistencies in his writings.

There is a different way to read the *Essays.* It is to leave the question of consistency *sub judice* and to consider them for another interest they have. They are an early statement of Smith's ideas about natural order and hence have a place in our reading of the *Theory of Moral Sentiments.* Over and above this, they merit our attention for the reason Joseph Schumpeter gave, which is that they reveal the mind of Smith in ways his other writings do not (Schumpeter 1954, p. 182). They are the work of a man of great erudition.

The quotation above from the essay on physics is followed by a reference to the idea of natural order, namely, ''the idea of an universal mind, of a God of all, who originally formed the whole by general laws, directed to the conservation and prosperity of the whole, without regard to that of any private individual.'' Smith calls this theism and says it is beyond the understanding of men whose minds can take them no further than polytheism.

The idea of natural order has a large place in the *Theory of Moral Sentiments* (1759), which, if the *Wealth of Nations* had never been written and the *Lectures* had not been transcribed, would have given Smith a different position in the history of ideas and would have lightened the work of historians. Here the invisible hand, unlike that of the *Essays,* is a component of the natural order and is not an idea superseded by it. As such, it is a power for good.

The subject of the *Theory of Moral Sentiments* is how we make ethical judgments, and that may or may not be matter for economists. What is matter for them is the distribution of income, and that also is a topic of the book. Smith explains what determines distribution and why in time income is distributed almost equally, even though the rich are selfish. The explanation is that they are foolish as well as rich and presumably are that way by the intention of a benevolent nature. They imagine there is no limit to what they can enjoy and so order whole harvests to be brought to them. Then they discover ''the eye is larger than the belly'' and must find something to do with what they cannot use themselves. And what is it? They give it to the poor:

> They [the rich] 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. [Smith 1976, p, 304]

As improbable as this invisible hand is, it does bear some resemblance to that of the *Wealth of Nations*. Each leads the selfish to help others and to help them without a cost to themselves. Also, in each book it has a favorable connotation, which certainly disposes of the notion that Smith regarded the invisible hand as a joke of some kind. But there are differences. The invisible hand of the *Wealth of Nations* guides the self-interest of no-nonsense merchants who after calculating the risk-adjusted rate of return to domestic and to foreign trade decide to conduct their business at home. The self-interest which the invisible hand of the *Theory of Moral Sentiments* guides is the self-interest of dumbbells who buy more than they can use and find themselves giving away much of it. And being dumbbells, they never learn. If they did, there would be only one redistribution. After that there would be no leftovers for the poor, and the invisible hand would have nothing to redistribute.

The *Theory of Moral Sentiments* is puzzling. How could an author be as cogent, astute, and plausible in one work, as Smith could be in the *Wealth of Nations*, and as inconsequent and implausible in another, as he was in the *Theory of Moral Sentiments*? Surely he did not mean the rich gave away much of their income. He is said to have meant they help the poor by giving them employment. If so, the poor get their income from working, not from leftovers, and an invisible hand is not needed to explain that. Only a tyro would reason as Smith seems to do in the *Theory of Moral Sentiments*, and he was not a tyro when he wrote it. He had been lecturing on economics for a number of years. The *Theory of Moral Sentiments* is puzzling in other ways as well as it is about the invisible hand, but this is not the place to describe it in its entirety.

It cannot be ignored here since it does refer to an invisible hand. That hand is quite different from the invisible hand of the *Wealth of Nations*, and neither of them resembles the invisible hand or being of the *Essays*. If there is a relation among them, as has been claimed, it has not been demonstrated with evidence from what Smith actually wrote. Until it is demonstrated, the three invisible hands will continue to be, in the mind of at least one reader, three distinct ideas, each of them denoted by the same words. Until then, the musical setting, if there is to be one, would better be in a modest form rather than an oratorio, for example as variations on a theme which itself is not played—something in the manner of Elgar's *Enigma* variations on a theme, which itself is not played and which the composer said was familiar to everyone. Elgar's theme is not and has elicited a number of conjectures of some ingenuity, just as the invisible hand has done. Its musical setting could be called *Enigma II*, the numeral being the defense against an action of copyright infringement that might be brought by the descendants of Elgar. Smith believed property rights should be protected, except when they should not be, and that is another enigma.

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