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A Personal Statement

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The Power of the Market

Every day each of us uses innumerable goods and services—to eat, to wear, to shelter us from the elements, or simply to enjoy. We take it for granted that they will be available when we want to buy them. We never stop to think how many people have played a part in one way or another in providing those goods and services. We never ask ourselves how it is that the corner grocery store—or nowadays, supermarket—has the items on its shelves that we want to buy, how it is that most of us are able to earn the money to buy those goods.

It is natural to assume that someone must give orders to make sure that the “right” products are produced in the “right” amounts and available at the “right” places. That is one method of coordinating the activities of a large number of people—the method of the army. The general gives orders to the colonel, the colonel to the major, the major to the lieutenant, the lieutenant to the sergeant, and the sergeant to the private.

But that command method can be the exclusive or even principal method of organization only in a very small group. Not even the most autocratic head of a family can control every act of other family members entirely by order. No sizable army can really be run entirely by command. The general cannot conceivably have the information necessary to direct every movement of the lowliest private. At every step in the chain of command, the soldier, whether officer or private, must have discretion to take into account information about specific circumstances that his commanding officer could not have. Commands must be supplemented by voluntary cooperation—a less obvious and more subtle, but far more fundamental, technique of coordinating the activities of large numbers of people.

Russia is the standard example of a large economy that is supposed to be organized by command—a centrally planned econ-

omy. But that is more fiction than fact. At every level of the economy, voluntary cooperation enters to supplement central planning or to offset its rigidities—sometimes legally, sometimes illegally.¹

In agriculture, full-time workers on government farms are permitted to grow food and raise animals on small private plots in their spare time for their own use or to sell in relatively free markets. These plots account for less than 1 percent of the agricultural land in the country, yet they are said to provide nearly a third of total farm output in the Soviet Union (are “said to” because it is likely that some products of government farms are clandestinely marketed as if from private plots).

In the labor market individuals are seldom ordered to work at specific jobs; there is little actual direction of labor in this sense. Rather, wages are offered for various jobs, and individuals apply for them—much as in capitalist countries. Once hired, they may subsequently be fired or may leave for jobs they prefer. Numerous restrictions affect who may work where, and, of course, the laws prohibit anyone from setting up as an employer—although numerous clandestine workshops serve the extensive black market. Allocation of workers on a large scale primarily by compulsion is just not feasible; and neither, apparently, is complete suppression of private entrepreneurial activity.

The attractiveness of different jobs in the Soviet Union often depends on the opportunities they offer for extralegal or illegal moonlighting. A resident of Moscow whose household equipment fails may have to wait months to have it repaired if he calls the state repair office. Instead, he may hire a moonlighter—very likely someone who works for the state repair office. The householder gets his equipment repaired promptly; the moonlighter gets some extra income. Both are happy.

These voluntary market elements flourish despite their inconsistency with official Marxist ideology because the cost of eliminating them would be too high. Private plots could be forbidden—but the famines of the 1930s are a stark reminder of the cost. The Soviet economy is hardly a model of efficiency now. Without the voluntary elements it would operate at an even lower level of effectiveness. Recent experience in Cambodia tragically illustrates the cost of trying to do without the market entirely.

Just as no society operates entirely on the command principle, so none operates entirely through voluntary cooperation. Every society has some command elements. These take many forms. They may be as straightforward as military conscription or forbidding the purchase and sale of heroin or cyclamates or court orders to named defendants to desist from or perform specified actions. Or, at the other extreme, they may be as subtle as imposing a heavy tax on cigarettes to discourage smoking—a hint, if not a command, by some of us to others of us.

It makes a vast difference what the mix is—whether voluntary exchange is primarily a clandestine activity that flourishes because of the rigidities of a dominant command element, or whether voluntary exchange is the dominant principle of organization, supplemented to a smaller or larger extent by command elements. Clandestine voluntary exchange may prevent a command economy from collapsing, may enable it to creak along and even achieve some progress. It can do little to undermine the tyranny on which a predominantly command economy rests. A predominantly voluntary exchange economy, on the other hand, has within it the potential to promote both prosperity and human freedom. It may not achieve its potential in either respect, but we know of no society that has ever achieved prosperity and freedom unless voluntary exchange has been its dominant principle of organization. We hasten to add that voluntary exchange is not a sufficient condition for prosperity and freedom. That, at least, is the lesson of history to date. Many societies organized predominantly by voluntary exchange have not achieved either prosperity or freedom, though they have achieved a far greater measure of both than authoritarian societies. But voluntary exchange is a necessary condition for both prosperity and freedom.

COOPERATION THROUGH VOLUNTARY EXCHANGE

A delightful story called “I, Pencil: My Family Tree as Told to Leonard E. Read”² dramatizes vividly how voluntary exchange enables millions of people to cooperate with one another. Mr. Read, in the voice of the “Lead Pencil—the ordinary wooden pencil familiar to all boys and girls and adults who can read and write,” starts his story with the fantastic statement that “*not a*

single person . . . knows how to make me." Then he proceeds to tell about all the things that go into the making of a pencil. First, the wood comes from a tree, "a cedar of straight grain that grows in Northern California and Oregon." To cut down the tree and cart the logs to the railroad siding requires "saws and trucks and rope and . . . countless other gear." Many persons and numberless skills are involved in their fabrication: in "the mining of ore, the making of steel and its refinement into saws, axes, motors; the growing of hemp and bringing it through all the stages to heavy and strong rope; the logging camps with their beds and mess halls, . . . untold thousands of persons had a hand in every cup of coffee the loggers drink!"

And so Mr. Read goes on to the bringing of the logs to the mill, the millwork involved in converting the logs to slats, and the transportation of the slats from California to Wilkes-Barre, where the particular pencil that tells the story was manufactured. And so far we have only the outside wood of the pencil. The "lead" center is not really lead at all. It starts as graphite mined in Ceylon. After many complicated processes it ends up as the lead in the center of the pencil.

The bit of metal—the ferrule—near the top of the pencil is brass. "Think of all the persons," he says, "who mine zinc and copper and those who have the skills to make shiny sheet brass from these products of nature."

What we call the eraser is known in the trade as "the plug." It is thought to be rubber. But Mr. Read tells us the rubber is only for binding purposes. The erasing is actually done by "Factice," a rubberlike product made by reacting rape seed oil from the Dutch East Indies (now Indonesia) with sulfur chloride.

After all of this, says the pencil, "Does anyone wish to challenge my earlier assertion that no single person on the face of this earth knows how to make me?"

None of the thousands of persons involved in producing the pencil performed his task because he wanted a pencil. Some among them never saw a pencil and would not know what it is for. Each saw his work as a way to get the goods and services he wanted—goods and services we produced in order to get the pencil we wanted. Every time we go to the store and buy a pencil,

we are exchanging a little bit of our services for the infinitesimal amount of services that each of the thousands contributed toward producing the pencil.

It is even more astounding that the pencil was ever produced. No one sitting in a central office gave orders to these thousands of people. No military police enforced the orders that were not given. These people live in many lands, speak different languages, practice different religions, may even hate one another—yet none of these differences prevented them from cooperating to produce a pencil. How did it happen? Adam Smith gave us the answer two hundred years ago.

THE ROLE OF PRICES

The key insight of Adam Smith's *Wealth of Nations* is misleadingly simple: if an exchange between two parties is voluntary, it will not take place unless both believe they will benefit from it. Most economic fallacies derive from the neglect of this simple insight, from the tendency to assume that there is a fixed pie, that one party can gain only at the expense of another.

This key insight is obvious for a simple exchange between two individuals. It is far more difficult to understand how it can enable people living all over the world to cooperate to promote their separate interests.

The price system is the mechanism that performs this task without central direction, without requiring people to speak to one another or to like one another. When you buy your pencil or your daily bread, you don't know whether the pencil was made or the wheat was grown by a white man or a black man, by a Chinese or an Indian. As a result, the price system enables people to cooperate peacefully in one phase of their life while each one goes about his own business in respect of everything else.

Adam Smith's flash of genius was his recognition that the prices that emerged from voluntary transactions between buyers and sellers—for short, in a free market—could coordinate the activity of millions of people, each seeking his own interest, in such a way as to make everyone better off. It was a startling idea then, and it remains one today, that economic order can emerge as the unin-

tended consequence of the actions of many people, each seeking his own interest.

The price system works so well, so efficiently, that we are not aware of it most of the time. We never realize how well it functions until it is prevented from functioning, and even then we seldom recognize the source of the trouble.

The long gasoline lines that suddenly emerged in 1974 after the OPEC oil embargo, and again in the spring and summer of 1979 after the revolution in Iran, are a striking recent example. On both occasions there was a sharp disturbance in the supply of crude oil from abroad. But that did not lead to gasoline lines in Germany or Japan, which are wholly dependent on imported oil. It led to long gasoline lines in the United States, even though we produce much of our own oil, for one reason and one reason only: because legislation, administered by a government agency, did not permit the price system to function. Prices in some areas were kept by command below the level that would have equated the amount of gasoline available at the gas stations to the amount consumers wanted to buy at that price. Supplies were allocated to different areas of the country by command, rather than in response to the pressures of demand as reflected in price. The result was surpluses in some areas and shortages plus long gasoline lines in others. The smooth operation of the price system—which for many decades had assured every consumer that he could buy gasoline at any of a large number of service stations at his convenience and with a minimal wait—was replaced by bureaucratic improvisation.

Prices perform three functions in organizing economic activity: first, they transmit information; second, they provide an incentive to adopt those methods of production that are least costly and thereby use available resources for the most highly valued purposes; third, they determine who gets how much of the product—the distribution of income. These three functions are closely interrelated.

Transmission of Information

Suppose that, for whatever reason, there is an increased demand for lead pencils—perhaps because a baby boom increases school

enrollment. Retail stores will find that they are selling more pencils. They will order more pencils from their wholesalers. The wholesalers will order more pencils from the manufacturers. The manufacturers will order more wood, more brass, more graphite—all the varied products used to make a pencil. In order to induce their suppliers to produce more of these items, they will have to offer higher prices for them. The higher prices will induce the suppliers to increase their work force to be able to meet the higher demand. To get more workers they will have to offer higher wages or better working conditions. In this way ripples spread out over ever widening circles, transmitting the information to people all over the world that there is a greater demand for pencils—or, to be more precise, for some product they are engaged in producing, for reasons they may not and need not know.

The price system transmits only the important information and only to the people who need to know. The producers of wood, for example, do not have to know whether the demand for pencils has gone up because of a baby boom or because 14,000 more government forms have to be filled out in pencil. They don't even have to know that the demand for pencils has gone up. They need to know only that someone is willing to pay more for wood and that the higher price is likely to last long enough to make it worthwhile to satisfy the demand. Both items of information are provided by market prices—the first by the current price, the second by the price offered for future delivery.

A major problem in transmitting information efficiently is to make sure that everyone who can use the information gets it without clogging the “in” baskets of those who have no use for it. The price system automatically solves this problem. The people who transmit the information have an incentive to search out the people who can use it and they are in a position to do so. People who can use the information have an incentive to get it and they are in a position to do so. The pencil manufacturer is in touch with people selling the wood he uses. He is always trying to find additional suppliers who can offer him a better product or a lower price. Similarly, the producer of wood is in touch with his customers and is always trying to find new ones. On the other hand, people who are not currently engaged in these

activities and are not considering them as future activities have no interest in the price of wood and will ignore it.

The transmission of information through prices is enormously facilitated these days by organized markets and by specialized communication facilities. It is a fascinating exercise to look through the price quotations published daily in, say, the *Wall Street Journal*, not to mention the numerous more specialized trade publications. These prices mirror almost instantly what is happening all over the world. There is a revolution in some remote country that is a major producer of copper, or there is a disruption of copper production for some other reason. The current price of copper will shoot up at once. To find out how long knowledgeable people expect the supplies of copper to be affected, you need merely examine the prices for future delivery on the same page.

Few readers even of the *Wall Street Journal* are interested in more than a few of the prices quoted. They can readily ignore the rest. The *Wall Street Journal* does not provide this information out of altruism or because it recognizes how important it is for the operation of the economy. Rather, it is led to provide this information by the very price system whose functioning it facilitates. It has found that it can achieve a larger or a more profitable circulation by publishing these prices—information transmitted to it by a different set of prices.

Prices not only transmit information from the ultimate buyers to retailers, wholesalers, manufacturers, and owners of resources; they also transmit information the other way. Suppose that a forest fire or strike reduces the availability of wood. The price of wood will go up. That will tell the manufacturer of pencils that it will pay him to use less wood, and it will not pay him to produce as many pencils as before unless he can sell them for a higher price. The smaller production of pencils will enable the retailer to charge a higher price, and the higher price will inform the final user that it will pay him to wear his pencil down to a shorter stub before he discards it, or shift to a mechanical pencil. Again, he doesn't need to know why the pencil has become more expensive, only that it has.

Anything that prevents prices from expressing freely the condi-

tions of demand or supply interferes with the transmission of accurate information. Private monopoly—control over a particular commodity by one producer or a cartel of producers—is one example. That does not prevent the transmission of information through the price system, but it does distort the information transmitted. The quadrupling of the price of oil in 1973 by the oil cartel transmitted very important information. However, the information it transmitted did not reflect a sudden reduction in the supply of crude oil, or a sudden discovery of new technical knowledge about future supplies of oil, or anything else of a physical or technical character bearing on the relative availability of oil and other sources of energy. It simply transmitted the information that a group of countries had succeeded in organizing a price-fixing and market-sharing arrangement.

Price controls on oil and other forms of energy by the U.S. government in their turn prevented information about the effect of the OPEC cartel from being transmitted accurately to users of petroleum. The result both strengthened the OPEC cartel, by preventing a higher price from leading U.S. consumers to economize on the use of oil, and required the introduction of major command elements in the United States in order to allocate the scarce supply (by a Department of Energy spending in 1979 about \$10 billion and employing 20,000 people).

Important as private distortions of the price system are, these days the government is the major source of interference with a free market system—through tariffs and other restraints on international trade, domestic action fixing or affecting individual prices, including wages (see Chapter 2), government regulation of specific industries (see Chapter 7), monetary and fiscal policies producing erratic inflation (see Chapter 9), and numerous other channels.

One of the major adverse effects of erratic inflation is the introduction of static, as it were, into the transmission of information through prices. If the price of wood goes up, for example, producers of wood cannot know whether that is because inflation is raising all prices or because wood is now in greater demand or lower supply relative to other products than it was before the price hike. The information that is important for the organization

of production is primarily about *relative* prices—the price of one item compared with the price of another. High inflation, and particularly highly variable inflation, drowns that information in meaningless static.

Incentives

The effective transmission of accurate information is wasted unless the relevant people have an incentive to act, and act correctly, on the basis of that information. It does no good for the producer of wood to be told that the demand for wood has gone up unless he has some incentive to react to the higher price of wood by producing more wood. One of the beauties of a free price system is that the prices that bring the information also provide both an incentive to react to the information and the means to do so.

This function of prices is intimately connected with the third function—determining the distribution of income—and cannot be explained without bringing that function into the account. The producer's income—what he gets for his activities—is determined by the difference between the amount he receives from the sale of his output and the amount he spends in order to produce it. He balances the one against the other and produces an output such that producing a little more would add as much to his costs as to his receipts. A higher price shifts this margin.

In general, the more he produces, the higher the cost of producing still more. He must resort to wood in less accessible or otherwise less favorable locations; he must hire less skilled workers or pay higher wages to attract skilled workers from other pursuits. But now the higher price enables him to bear these higher costs and so provides both the incentive to increase output and the means to do so.

Prices also provide an incentive to act on information not only about the demand for output but also about the most efficient way to produce a product. Suppose one kind of wood becomes scarcer and therefore more expensive than another. The pencil manufacturer gets that information through a rise in the price of the first kind of wood. Because his income, too, is determined by

the difference between sales receipts and costs, he has an incentive to economize on that kind of wood. To take a different example, whether it is less costly for loggers to use a chain saw or handsaw depends on the price of the chain saw and the handsaw, the amount of labor required with each, and the wages of different kinds of labor. The enterprise doing the logging has an incentive to acquire the relevant technical knowledge and to combine it with the information transmitted by prices in order to minimize costs.

Or take a more fanciful case that illustrates the subtlety of the price system. The rise in the price of oil engineered by the OPEC cartel in 1973 altered slightly the balance in favor of the handsaw by raising the cost of operating a chain saw. If that seems far-fetched, consider the effect on the use of diesel-powered versus gasoline-powered trucks to haul logs out of the forests and to the sawmill.

To carry this example one step further, the higher price of oil, insofar as it was permitted to occur, raised the cost of products that used more oil relative to products that used less. Consumers had an incentive to shift from the one to the other. The most obvious examples are shifts from large cars to small ones and from heating by oil to heating by coal or wood. To go much further afield to more remote effects: insofar as the relative price of wood was raised by the higher cost of producing it or by the greater demand for wood as a substitute source of energy, the resulting higher price of lead pencils gave consumers an incentive to economize on pencils! And so on in infinite variety.

We have discussed the incentive effect so far in terms of producers and consumers. But it also operates with respect to workers and owners of other productive resources. A higher demand for wood will tend to produce a higher wage for loggers. This is a signal that labor of that type is in greater demand than before. The higher wage gives workers an incentive to act on that information. Some workers who were indifferent about being loggers or doing something else may now choose to become loggers. More young people entering the labor market may become loggers. Here, too, interference by government, through minimum wages, for example, or by trade unions, through re-

stricting entry, may distort the information transmitted or may prevent individuals from freely acting on that information (see Chapter 8).

Information about prices—whether it be wages in different activities, the rent of land, or the return to capital from different uses—is not the only information that is relevant in deciding how to use a particular resource. It may not even be the most important information, particularly about how to use one's own labor. That decision depends in addition on one's own interests and capacities—what the great economist Alfred Marshall called the whole of the advantages and disadvantages of an occupation, monetary and nonmonetary. Satisfaction in a job may compensate for low wages. On the other hand, higher wages may compensate for a disagreeable job.

Distribution of Income

The income each person gets through the market is determined, as we have seen, by the difference between his receipts from the sale of goods and services and the costs he incurs in producing those goods and services. The receipts consist predominantly of direct payments for the productive resources we own—payments for labor or the use of land or buildings or other capital. The case of the entrepreneur—like the manufacturer of pencils—is different in form but not in substance. His income, too, depends on how much of each productive resource he owns and on the price that the market sets on the services of those resources, though in his case the major productive resource he owns may be the capacity to organize an enterprise, coordinate the resources it uses, assume risks, and so on. He may also own some of the other productive resources used in the enterprise, in which case part of his income is derived from the market price for their services. Similarly, the existence of the modern corporation does not alter matters. We speak loosely of the "corporation's income" or of "business" having an income. That is figurative language. The corporation is an intermediary between its owners—the stockholders—and the resources other than the stockholders' capital, the services of which it purchases. Only people have incomes and

they derive them through the market from the resources they own, whether these be in the form of corporate stock, or of bonds, or of land, or of their personal capacity.

In countries like the United States the major productive resource is personal productive capacity—what economists call "human capital." Something like three-quarters of all income generated in the United States through market transactions takes the form of the compensation of employees (wages and salaries plus supplements), and about half the rest takes the form of the income of proprietors of farms and nonfarm enterprises, which is a mixture of payment for personal services and for owned capital.

The accumulation of physical capital—of factories, mines, office buildings, shopping centers; highways, railroads, airports, cars, trucks, planes, ships; dams, refineries, power plants; houses, refrigerators, washing machines, and so on and on in endless variety—has played an essential role in economic growth. Without that accumulation the kind of economic growth that we have enjoyed could never have occurred. Without the maintenance of inherited capital the gains made by one generation would be dissipated by the next.

But the accumulation of human capital—in the form of increased knowledge and skills and improved health and longevity—has also played an essential role. And the two have reinforced one another. The physical capital enabled people to be far more productive by providing them with the tools to work with. And the capacity of people to invent new forms of physical capital, to learn how to use and get the most out of physical capital, and to organize the use of both physical and human capital on a larger and larger scale enabled the physical capital to be more productive. Both physical and human capital must be cared for and replaced. That is even more difficult and costly for human than for physical capital—a major reason why the return to human capital has risen so much more rapidly than the return to physical capital.

The amount of each kind of resource each of us owns is partly the result of chance, partly of choice by ourselves or others. Chance determines our genes and through them affects our physi-

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cal and mental capacities. Chance determines the kind of farOne result has been an attempt to separate this function of the
and cultural environment into which we are born and as a rice system—distributing income—from its other functions—
our opportunities to develop our physical and mental capaansmitting information and providing incentives. Much govern-
Chance determines also other resources we may inherit from nt activity during recent decades in the United States and
parents or other benefactors. Chance may destroy or enhae countries that rely predominantly on the market has been
the resources we start with. But choice also plays an imporected at altering the distribution of income generated by the
role. Our decisions about how to use our resources, whethearket in order to produce a different and more equal distribution
work hard or take it easy, to enter one occupation or anot income. There is a strong current of opinion pressing for still
to engage in one venture or another, to save or spend—these rther steps in this direction. We discuss this movement at greater
determine whether we dissipate our resources or improve ight in Chapter 5.

add to them. Similar decisions by our parents, by other beneHowever we might wish it otherwise, it simply is not possible
tors, by millions of people who may have no direct connecuse prices to transmit information and provide an incentive to
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The price that the market sets on the services of our resounot completely determine, the distribution of income. If what a
is similarly affected by a bewildering mixture of chance rson gets does not depend on the price he receives for the
choice. Frank Sinatra's voice was highly valued in twentirvices of his resources, what incentive does he have to seek out
century United States. Would it have been highly valuedormation on prices or to act on the basis of that information?
twentieth-century India, if he had happened to be born ancRed Adair's income would be the same whether or not he per-
live there? Skill as a hunter and trapper had a high valuems the dangerous task of capping a runaway oil well, why
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in twentieth-century America. Skill as a baseball player brow the excitement. But would he make it his major activity? If
much higher returns than skill as a basketball player in the 19ur income will be the same whether you work hard or not, why
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where we choose to settle, how we choose to use those resourysical capital ever have been built up by the voluntary restraint
to whom we choose to sell their services, and so on. individuals? If there is no reward for maintaining capital, why

In every society, however it is organized, there is always ould people not dissipate any capital which they have either
satisfaction with the distribution of income. All of us find it hcumulated or inherited? If prices are prevented from affecting
to understand why we should receive less than others who se distribution of income, they cannot be used for other purposes.
no more deserving—or why we should be receiving more thame only alternative is command. Some authority would have to
many others whose needs seem as great and whose deserts scide who should produce what and how much. Some authority
no less. The farther fields always look greener—so we blame ould have to decide who should sweep the streets and who man-
existing system. In a command system envy and dissatisfacfe the factory, who should be the policeman and who the physi-
are directed at the rulers. In a free market system they an.
directed at the market.

The intimate connection among the three functions of the

price system has manifested itself in a different way in the communist countries. Their whole ideology centers on the alleged exploitation of labor under capitalism and the associated superiority of a society based on Marx's dictum: "to each according to his needs, from each according to his ability." But the inability to run a pure command economy has made it impossible for them to separate income completely from prices.

For physical resources—land, buildings, and the like—they have been able to go farthest by making them the property of the government. But even here the effect is a lack of incentive to maintain and improve the physical capital. When everybody owns something, nobody owns it, and nobody has a direct interest in maintaining or improving its condition. That is why buildings in the Soviet Union—like public housing in the United States—look decrepit within a year or two of their construction, why machines in government factories break down and are continuously in need of repair, why citizens must resort to the black market for maintaining the capital that they have for their personal use.

For human resources the communist governments have not been able to go as far as with physical resources, though they have tried to. Even they have had to permit people to own themselves to some extent and to let them make their own decisions, and have had to let prices affect and guide those decisions and determine the income received. They have, of course, distorted those prices, prevented them from being free market prices, but they have been unable to eliminate market forces.

The obvious inefficiencies that have resulted from the command system have led to much discussion by planners in socialist countries—Russia, Czechoslovakia, Hungary, China—of the possibility of making greater use of the market in organizing production. At a conference of economists from East and West, we once heard a brilliant talk by a Hungarian Marxist economist. He had rediscovered for himself Adam Smith's invisible hand—a remarkable if somewhat redundant intellectual achievement. He tried, however, to improve on it in order to use the price system to transmit information and organize production efficiently but not to distribute income. Needless to say, he failed in theory, as the communist countries have failed in practice.

A BROADER VIEW

Adam Smith's "invisible hand" is generally regarded as referring to purchases or sales of goods or services for money. But economic activity is by no means the only area of human life in which a complex and sophisticated structure arises as an unintended consequence of a large number of individuals cooperating while each pursues his own interests.

Consider, for example, language. It is a complex structure that is continually changing and developing. It has a well-defined order, yet no central body planned it. No one decided what words should be admitted into the language, what the rules of grammar should be, which words should be adjectives, which nouns. The French Academy does try to control changes in the French language, but that was a late development. It was established long after French was already a highly structured language and it mainly serves to put the seal of approval on changes over which it has no control. There have been few similar bodies for other languages.

How did language develop? In much the same way as an economic order develops through the market—out of the voluntary interaction of individuals, in this case seeking to trade ideas or information or gossip rather than goods and services with one another. One or another meaning was attributed to a word, or words were added as the need arose. Grammatical usages developed and were later codified into rules. Two parties who want to communicate with one another both benefit from coming to a common agreement about the words they use. As a wider and wider circle of people find it advantageous to communicate with one another, a common usage spreads and is codified in dictionaries. At no point is there any coercion, any central planner who has power to command, though in more recent times government school systems have played an important role in standardizing usage.

Another example is scientific knowledge. The structure of disciplines—physics, chemistry, meteorology, philosophy, humanities, sociology, economics—was not the product of a deliberate