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ECON IS A FOUR-LETTER WORD

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Four-letter words have a reputation for being expressive, even when they are obscene, and as I have just published a little book called *The Economy of Love and Fear*—two good four-letter words—I have amused myself by trying to see how much essential economic, and indeed philosophical, truth can be expressed with good four-letter words without indulging in that polysyllabism which is the cant of the prof.

The most basic concept of economics is undoubtedly that of the swap. This is in prof-cant talk the theory of exchange, which is really a special case of the theory of the dyad (aha! a four-letter high word!). A dyad consists of all the transfers between two parties, call them A and B. When an economic good passes from A to B and another economic good of approximately equal value passes from B to A, we have a swap, or exchange. A good deal of economics is concerned with the terms or the rate of exchange, that is, the ratio of the quantities exchanged. Where money (cash) is one of the things exchanged, the rate of swap is price; where work is exchanged for cash, the rate of swap is the wage.

These are all important and useful concepts, but there is something beyond them. There is not only the swap; there is the gift, that is, a one-way transfer of an economic good. This is an example of the grants relationship in which A transfers an economic good to B, and B transfers no corresponding economic good to A, though both A and B may transfer noneconomic goods or bads between each other. Not all such transfers, however, are gifts; some might be described as a take, as in the case of the thief, the bandit, or the tax collector. The gift is made out of love; the take (tribute) is made out of fear. This is why I called my theory of the grants economy the economy of love and fear.

Often, however, it is not so easy to tell one from the other. Grants are often made out of a mixture of love and fear, that is, benevolence and identification on the one hand and a response to threat on the other. Taxes are a particularly good case in point. I frankly pay my taxes only because, if I did not, I would get into more trouble than it would be worth. If the federal government were financed by a "United Fund," I would not subscribe very

much. It is also true, however, that the society which nobody loves and which collects taxes by pure fear finds it very hard to collect taxes.

I have argued that the grants economy must be included in this central part of the economic system; to give or to take is not the same thing as to swap, and an exchange economy always has to be supplemented by a grants economy. Historically, indeed, grants are older than exchange. Economics begins in the hunting and food gathering family, or band. The food is brought in usually by the male in the case of meat, though the root and the seed are often gathered by his mate, who also tends to be the cook. The food is then distributed to the various members of the clan according to need. Without a grants economy the human race could not survive for even one generation; children have to be supported by grants, otherwise they would die, for when young they have nothing to give in exchange.

Even within the family there is a subtle and often almost unconscious exchange economy. Each gives and each takes, and if any one member regards the total terms of trade as too unfavorable, that is, giving out too much and not getting enough in return, there will be a tendency for the relationship to break up.

There are also exchanges over time. In traditional societies parents put resources into their children as a kind of investment, the returns for which they will enjoy when they are supported by their children in their old age. Most people in primitive societies do not reach old age, however, and many are abandoned even when they do, if the going is rough and things get scarce. It is pretty dangerous to try to regard the support of children solely in terms of investment. Without the sense of community which the grants economy implies, the human race would clearly not survive.

Even with the development of agriculture, which might be described as the move from the wild to the tame and the invention of the farm, exchange remained very primitive. The neolithic village was much more like an extended family, with the food distributed largely by a process of grants, than it was like a corn market.

In the development of civilization, which is what takes place in the city, the early stages were much more take than swap. Civilization, that is, the urban revolution, depended on the development of organized threat systems which could take surplus food away from the farm. With this surplus, the priest, lord, or king, fed

his soldiers, builders, artisans, and slaves, and so built his temples and palaces, performed his ceremonies and fought his wars, thus dividing the world into the rich and the poor.

As John Hicks suggests in *A Theory of Economic History,* trade on anything more than a local scale probably began with the stewards of the kings exchanging surpluses. The division of labor really began under the grants economy of the kings' courts, where the kings supported artisans and craftsmen of various kinds. The latent principles of comparative advantage, however, asserted themselves, urban centers began to specialize in different things, and trade between them developed, so that the kings' stewards grew into an independent class of merchants. Then, as Adam Smith portrays so graphically, the division of labor increases the extent of the market, and a rise in the extent of the market increases the division of labor. This process sets in motion what today we would call "deviation-amplifying positive feedback," and the network of trade and specialization grows until now it covers the whole earth.

Capitalism, of course, is the apotheosis of the swap. It is a society in which exchange and the institutions of exchange dominate over the earlier institutions of threat, the "take economy" of early civilization, with its institutions of slavery and conquest. Capitalism or the "swap economy" is dominated by markets—commodity markets, capital markets, and labor markets, even land markets. Money operates as the medium of exchange. Goods are exchanged for money, labor is exchanged for money, land is exchanged for money, and promises of various kinds, that is, future obligations or securities, are exchanged for money. However, money itself is in quite a real sense a "veil" which often obscures the true relationships of the whole structure of terms of trade, which is the vast set of ratios of what everybody puts in to what everybody gets out. What one puts in is turned into money valued at a certain set of prices, and that money is in turn transformed into what one gets out by another set of prices.

A pure exchange economy, however, could not possibly survive. It has to be supplemented by a grants economy of one-way transfers. The extent and the structure of the grants economy in turn depend mainly on the nature of the bond which holds the society together, that is, on the structure of what I have called the "integrative system."

The smallest bond which makes the human race possible is the family. However, the family, or the kinship group is not the only group to which we are bonded. In the course of social evolu-

tion there seems to have been an almost irreversible tendency for the size of the integrative group—that group which feels some sense of community and which is bonded together by an internal grants economy—to increase both in extent and in intensity. The band, the clan, the tribe, the manor, the guild, the church, the nation, the state, and now the world, represent successive expansions of the bonded group and of the grants economy. Today, after the family, the national state is about the strongest integrative structure. In the United States, for instance, some 7 or 8 percent of the gross national product is now redistributed in grants through the institutions of government, and only some 2 percent through private charity, foundations, and so on. Even at the world level, we now have a grants economy beyond the national state, in such things as foreign aid, which may be as much as 0.5 percent of the gross world product.

There is, furthermore, a very complex interaction between the threat system and the integrative system, in that we sometimes learn to love those who threaten us, or even to threaten those whom we love. It is a familiar principle in psychology that ambivalence may be a more powerful binding instrument than either pure love or pure fear. An extraordinarily complicated set of learning processes is at work here which I cannot pretend to unscramble.

Part of this may be explained by the so-called "approach-avoidance conflict" of Neal Miller, which can be illustrated by an extension of the "Buridan's ass problem." This is the classical problem of the donkey between two equally attractive bales of hay, the question being: Will he starve to death? The answer is "no," because random forces will move him closer to one bale, which will be more attractive, and he will eat that one and then go eat the other one. If, however, he is between two skunks, the position is much more difficult. As he moves toward one he is driven back to the middle, and he ends up a neurotic kicking and screaming. Suppose now that a skunk is sitting on a bale of hay, and the donkey approaches it until the repulsion of the skunk is just equal to the attraction of the hay. Then, again, he is stuck and is in the kind of "bind" that Gregory Bateson has described. It is not surprising, therefore, that the great integrative structures all seem to involve "binds" of this kind. Almost literally what produces a bond is a bind.

The great symbols—motherhood, the flag, the cross—are all symbols of ambivalence. We both hate and love our parents, as Freud taught us. And we both hate and love our country and our God. Fear and love go hand in hand in the establishment

of any integrative community and any kind of economy. For this very reason perhaps it is quite easy for both integrative structures and the grants system to become sick, and the study of these sicknesses is an extremely important part of what the social sciences have to offer. The truth seems to be that all systems have pathological states. That is, in the field of possible positions of any system there is what we might call a "sick line," on one side of which the system can be regarded as well and on the other side as sick. This is certainly true of the human body; it is true of all bodies, politic, economic, religious, or social.

The fallacy which causes the greatest amount of trouble in the world is what might be called the "white hat fallacy," that some things are always good and other things are always bad. The truth is that all things and all systems may be good in some phases and evil in others. Thus, earnest and liberal minded people tend to think of exchange as somehow bad, or at least slightly dirty—things are "smeared, bleared with trade," as Gerard Manley Hopkins said. Conversely, the gift or grant is regarded as intrinsically good and noble. This is an unfortunate oversimplification. The exchange system undoubtedly has its pathological states with which we are highly familiar in terms of deflation or inflation, maldistribution, and so on.

A pure exchange economy is unthinkable. Nevertheless, the grants economy also has its pathological states and indeed, in more general terms, integrative systems have pathological states. Mother love can become oppressive and dominating. We are all aware that there are highly pathological states of the family as well as highly desirable ones.

Addiction is a very powerful source of pathological states. We might even call this the "trap phenomenon." I have identified, for instance, within the grants economy what I call the "sacrifice trap." Sacrifice becomes a trap because once we start making sacrifices for anything our identity becomes deeply involved with the object for which we have made the sacrifices, hence we cannot admit to ourselves that our sacrifices are in vain and we go on making them. This is the great principle that the blood of the martyrs is the seed of the church, the blood of the soldiers is the seed of the state, the tears of the children the seed of the family, and the agonies of the student the seed of the alumni association.

Loyalty, again, is developed by the right mixture of love and fear. On the other hand, the capacity of a system to attract loyalty is only loosely related to its capacity to produce welfare, whatever that is. Human history is full of examples of systems that attracted

tremendous loyalties, which have been quite unworthy of the loyalties they attracted and which have eventually collapsed. The ultimate test of the sacrifice trap is that it is unstable. An institution can demand increasing sacrifices up to a point, at which somebody says "to hell with it" and the whole thing collapses—the family splits up, the temples are deserted, the king has his head cut off, kids drop out from school, and somebody gives a war and nobody comes.

Sacrifice is not the only thing to which we become addicted. We become addicted to drugs, and this is widely admitted as a pathological state. We can also become addicted to automobiles, to luxury, to sex, to alcohol. In fact, one is almost tempted to define "sin" as addiction-producing activity, in which the pursuit of the activity increases the demand for it, and hence produces a dynamic process without equilibrating constraints, which ultimately leads into some sort of disaster.

We have to look at grants very carefully to see under what circumstances they become addictive. Last year I put out a hummingbird feeder, which in effect created a welfare system and a grants economy for hummingbirds around my cabin. The situation rapidly became pathological. There was a population explosion. The birds apparently abandoned their work of getting honey out of flowers and spent all their time fighting with each other over the feeder. As a result of observing this, I have abandoned the feeder. Though I do not see quite so many hummingbirds, the ecological situation, I am sure, is much healthier.

There is a moral in this for societies. One can indeed point to countries like Uruguay, which have developed acute pathological states of the grants economy. Something that started off as a legitimate request for justice and an appropriate supplement to correct the deficiencies in the exchange economy became pathological in the sense that it weakened the central economic activity from which grants had to come. If redistribution destroys what has to be distributed, it easily becomes pathological. The boundary, however, between the well and the sick states of the system is often extremely hard to determine. We may cross it imperceptibly. This, again, underlines the necessity for the most careful analysis of pathology, for it is often fatally easy both for the individual person and for organizations and social systems to cross the line into pathological conditions that can lead the system into disaster.

Perhaps another way of putting the same problem is what I have called the "parabola principle." If we plot any variable what-

soever against some measure of its "goodness," we will find that as the variable increases, goodness first rises to a maximum and then diminishes following the line roughly of a parabola. Small quantities of almost anything are a good or a virtue, and large quantities of everything are evil and a vice. The marginal goodness of anything diminishes as we increase its quantity. We might call this the "great law of too much."

Unfortunately, it is easy to postulate the great parabolas of goodness, but it is very hard to find out where they are. This requires a constant process of examination, evaluation, communication, criticism, selection, and so on. What we must resist is the temptation to take any single variable or virtue as a measure of the ultimate good. This would imply a linear relationship between the supposed measure and the ultimate good, so that more of it would always be better. The fundamental principle is that one can have too much of anything, even of justice, freedom, dignity, and though I hate to admit this, compassion. We usually have so little of these virtues that the position of the field is well on the rising side of the goodness curve, and in most practical situations more of these things is almost always better. Beyond a certain point, however, justice degenerates into tyranny, freedom degenerates into license, dignity degenerates into pride, and even compassion degenerates into mawkishness.

I have skipped over two problems of great importance and difficulty. One is the measurement of subordinate goals, such as justice and freedom. A set of social indicators which will tell us whether the United States is a more or less just society than Canada would be pretty hard to construct, even though we all may have rather strong feelings that both the United States and Canada are more just societies than South Africa or Czechoslovakia. Similar difficulties arise in the measurement of any of the virtues, whether political or private. We do in fact construct scales for these virtues. Martin Luther King was certainly a much more compassionate man than Calvin Coolidge, though Calvin Coolidge may have been more prudent than Martin Luther King. Fine tuning, however, in the measurement of the virtues and vices is extremely difficult. It may be altogether impossible.

The second difficult problem is that virtues and vices are interrelated. So we cannot assume that the marginal goodness of any virtue, that is, the amount by which the good increases per unit increase in the virtue itself, is independent of the amount of other virtues and vices which are present. I know of no proposition even which says that the goodness function is homogeneous in any

degree, and it may exhibit sharp discontinuities. It may be indeed that the "parabola" is a discontinuous function and not a parabola at all. The "goodness function" may look more like a mesa than a rounded mountain. That is, the top may be quite flat, meaning that we can have wide variations in the system which are about equally good. It may also have cliffs, in the sense that at certain points small changes in the system produce dramatic worsening. We can tolerate a certain diminution of, say, justice and freedom. Beyond a certain point, however, any further diminution becomes intolerable.

The whole issue of toleration as a virtue is of great interest because this reflects the nature of our image of the goodness function itself. If we have a mesa-like image of a function, where a wide range of conditions and values of different variables is about equally good, toleration is clearly a high virtue. These are the circumstances in which the best easily becomes the enemy of the good, and a finicky or fanatical search for the top of a flat mesa becomes frustrating and destructive. On the other hand, when we are close to the edge, toleration becomes an acute vice. To tolerate the intolerable leads to destruction.

Another aspect of the interrelation of vices and virtues is that they are not independent in "production," since the limits on possible states of the world may impose trade-offs at the boundaries of these limitations. This is another reason why virtues and vices cannot be evaluated singly. If having more justice involves having less freedom, we have to evaluate not only the gain from the increase in justice but the loss from the diminution of freedom. The optimum amount of justice depends on how much freedom we have to go along with it. These limitations are not absolute. Just as we can have development in the case of commodities which gives us more of everything, we may be able to have development in moral learning, in institutional arrangements, or in political devices which gives us both more justice and more freedom. If there is indeed a potential for development, then the payoffs to development are usually much greater than the payoffs to conflict. It is often better to devote ourselves to getting more of all the virtues than to argue about how much we have to give up of one to get a certain amount of the other.

Both the complexity and the necessity of these principles can be illustrated by asking what looks like a deceptively simple question: What is the optimum degree of inequality or equality in a society? This is a question from which conventional economics recoils in horror as being completely beyond its capability. It is

surely a question, however, which in regard to economic good or economic welfare is in the province of the economist, even though he might be disposed to leave the question of ultimate spiritual equality to the philosopher or theologian. If economists, however, cannot apply their tools and skills to the examination of the problem of economic equality, who can substitute for them?

Economic equality can be measured, at least roughly, in terms of a number of possible properties of the distribution either of income or of wealth among individuals. Having half a dozen possible measures does not detract from the fact that this many, even when inconsistent, are better than none. Most of the measures do move in the same direction. It may even be possible to measure the demand for equality.

The existence of lotteries suggests that there is a demand for inequality, for a lottery clearly makes distribution more unequal. Many people would rather live in a system in which there is some chance of being rich than no chance of being rich. Furthermore, the fact that people buy lottery tickets at a price which is higher than their actuarial value suggests that people are prepared to pay something for a chance of benefiting from inequality and have a positive preference for inequality.

The extent of the preference for inequality, however, is going to depend on the level of malevolence, selfishness, or benevolence in society. In a malevolent society where some people will take satisfaction in contemplation of the poverty of others, the social lottery will be unfair, with lots of tickets for some and none for others. In a purely selfish society, in which an economist would say utility functions are independent and in which the welfare of one person does not depend in any way on his contemplation of the welfare of others—a most unlikely case one might add—there may be a demand for something like a fair lottery. That is, there may be a demand for luck. That this is not unreasonable may be seen by the reflection that a society in which everybody got exactly what he deserved might well be intolerable. A society in which there is no relation whatever between rewards and desert might be equally intolerable.

In a benevolent society, on the other hand, there will be a demand for equality simply because of pity, that is, the lessening of welfare which results from contemplation of someone worse off than one's self. Pity, however, may not be the only source of the demand for equality; it may also arise from envy, another four-letter word. This is the diminution of satisfaction which arises from contemplation of someone better off than we are. Just as

grants in general, therefore, are a result of an interaction of love and fear, so that particular aspect of the grants economy which involves a reduction or even, under some hypothetical circumstances, an increase in inequality beyond what the exchange economy would provide, originates in pity and envy. Pity moves people to gifts; envy moves people to threats and leads to redistributions through fear. The interactions of love, fear, pity, and envy, in determining what we think is fair and even are subtle in the extreme and we cannot hope to cover them in a short paper. These concepts, however, are crucial to the interpretation of some of the most important aspects of economic life. They go far beyond the simple theory of swap.

There is more to four-letter economics even than this. Decision theory, of course, is how we pick, usually under conditions of risk, and this depends on how we rate the different things there are to pick. I have not even touched on the theory of rent. Population and pollution may be represented by two indelicate four-letter words about which again there is a great deal to say. The law of diminishing returns, however, applies to the discussion of four-letter words as to everything else, and it is clearly time to stop.