Maximization Theories and the Study of Economic Anthropology[1]

ROBBINS BURLING
University of Pennsylvania

ECONOMICS, along with religion, kinship, and all the other subjects that make up the table of contents of innumerable anthropological monographs, has long been confidently felt to include a tolerably well-defined type of human behavior. We manage to communicate with each other when we speak of economic activities, of economic motives, and of economic groups, even when we fail to give these phrases explicit definitions. Nevertheless, "economics" has had almost as many meanings to anthropologists as has "function," and the confusion between its various meanings has lead to as much misunderstanding. At one time or another, anthropologists have given at least five meanings to the term: 1) the study of the *material* means to man's existence; 2) the study of the production, distribution, and consumption of goods and services; 3) the study of the things that economists study; 4) the study of systems of exchange however they are organized; and 5) the study of the allocation of scarce means to alternative ends. None of these definitions covers exactly the same area of behavior as any other. In the first half of this paper I will argue that the first definition refers to an area of behavior that is probably better called by a less ambiguous term, while the second is too general to have much meaning. The third turns out to be grossly illogical and ethnocentric. The fourth is perhaps too limited, although it would seem useful for certain purposes, and it is logically unassailable. In the second half of the paper, I will give special attention to the problems and possibilities of the fifth definition.

? product distrib. ?

THE MEANINGS OF "ECONOMICS"

1) *Economics deals with the material means to man's existence.* Even economists have long claimed to equate the material side of life with economic behavior, so it is hardly surprising to find anthropologists following them. In our discussions, material life has figured in several different ways. Many an older monograph simply took economics to be synonymous with technology and carefully recorded such interesting data as how sleds are made, or how skins are tanned, under the heading of "economic life." This particular use of the term has pretty well gone out of style and without belaboring a point that has been made entirely adequately by others (e.g., Herskovits 1952:57), I think that it can be assumed that few of us are still likely to confuse economics with technology. Other aspects of material life, however, still regularly crop up in our discussions of economics. We all speak of the Australians as having a "hunting and gathering economy," or of the Bedouin as having a "pastoral

economy," and many of us still speak of stages in economic development, or at least of the agricultural revolution, as being in the first instance an "economic revolution." These phrases all imply that economics is equivalent to the study of subsistence methods, an idea not so very far removed from defining it as technology. Economics also has sometimes been used in a slightly broader sense, equivalent to what others have called ecology, or the total way in which the culture is adjusted to its environment. This can include not only the ways in which nourishment can be extracted from the forests, or streams, or soil, but also the way in which feathers for ceremonial headdresses are obtained, or the way in which the environment is reflected in the mythology of the people.

These definitions all hinge upon the notion that economics is somehow concerned with *material* goods and it is this that has caused more confusion between anthropologists and economists than almost anything else. It is true that economists themselves have sometimes defined economics as "the study of the causes of material welfare" or the "study of [human action] connected with the attainment and with the use of material requisites of well being" (Herskovits 1952:45–46). When they have done so, however, they have had to define "material" in such a broad way that it loses its ordinary meaning of visible tangible artifacts, and some economists have maintained that whether or not a good or service is material has nothing to do with whether it is economic. In a classic essay which deserves to be read by all anthropologists who feel that they have an interest in economics, the British economist Lionel Robbins devastated these materialist definitions (1935). He pointed out that economists regularly deal with many nonmaterial aspects of life. Wages may be paid to people who do material tasks and prices may be applied to material goods, but wages and prices are just as firmly assigned to nonmaterial events as well. The wages earned by an opera singer, and the price of a ticket to hear him perform, have nothing material about them, though they are surely economic. War is actually destructive of material goods, but to wage war successfully, one must certainly economize. But the real point is that we must repeatedly economize *between* material and nonmaterial ends. We must make repeated choices between goals, some of which are material while some are not. We must decide whether added leisure is more important to us than the extra money we could earn by working overtime. Would I rather have a new car or a trip to Europe? It is nonsense to pretend that all of these goals are "material," at least if "material" is intended to have any normal meaning at all, but if these choices are economic choices, and by any conventional use of the term by economists they most assuredly are, then the term economics embraces far more than simply material life. We can hardly speak of some of our goals as being "economic" and others as "noneconomic" if the very choice between the different goals is an economic decision and if we have to economize our resources in attaining our choices. Robbins points out that in a sense it is even possible to say that *none* of our goals are ultimately material. "Income from [even] a material object must in the last resort be conceived as 'immaterial' use. From my house equally as from my valet or the services of the opera singer, I

3
choices

derive an income which 'perishes in the moment of its production' " (Robbins 1935:8).

I am aware of only one attempt in which economists have been involved in recent years to take seriously the notion that the material side of life has any distinctive claim on economic theory. This is in the book *Trade and Market in the Early Empires* by Karl Polanyi and his associates (1957). The authors of the book explicitly reject most of traditional economics, at least as far as its potential applicability to societies other than our own is concerned. I
Polanyi makes a long needed distinction between economics in the substantive sense of the provision of material goods, and in the formal sense of rationalizing calculation or "economizing" (corresponding roughly to the first and fifth definitions considered in this paper). He seems to believe, however, that in modern Western society the two definitions cover much the same ground. "As long as the economy was controlled by [price making markets] the formal and the substantive meanings [of 'economic'] would in practice coincide" (Polanyi 1957:244). If this means that the two definitions cover the same area of behavior, it is simply untrue, because our market organized economy does embrace many nonmaterial, nonsubstantive items, while on the other hand, as I will take pains to point out in detail later, some material goods are sometimes distributed outside the market system. Even in our own society the material side of life and the market system do not coincide, although they do overlap. II
Polanyi and his associates are right to distinguish the two definitions of economics and right to emphasize that in primitive societies they may not correspond. III I believe that they are wrong to assume that they correspond any better in our society, IV and I feel that their discussion rather obscures the possibility that primitives may also "economize" (i.e., practice rationalizing calculation), even in the absence of a market. Furthermore, given the choice between the
(A) substantive and rationalizing definitions, I think it is unfortunate to use the word economic for the former, in defiance of most customary practice. V If one wishes arbitrarily to define economics in this way, it is impossible to call him
(B) wrong, but except for Polanyi and his colleagues this is a use of the term which has very little to do with the work of practicing economists. VI Moreover, for anthropologists it is a terribly arbitrary decision to consider material goods to be economic, but services (which are certainly nonmaterial) to be noneconomic. What happens when one exchanges a material object for a nonmaterial service? Is one half of the transaction to be considered economic and the other noneconomic? Only under a market system

Technology, subsistence, and ecology are all important areas of study, and
C the real question as far as this paper is concerned is whether we wish to waste the term "economic" on them when other terms are available, and when they leave out so much which we usually feel belongs to "economics." The exchange of ceremonial jewelry, the inheritance of crests, or in our own society the possession of copyrights, are usually considered pretty unambiguously to be economic phenomena, even though they are hardly a part of subsistence activities
D or the "material side of life." My feeling is that it is better to call technology,

we usually feel belongs

subsistence, and ecology by their own terms, and not glorify them by the term "economic" which is better reserved for a broader concept. No doubt we will continue to understand each other when we speak of "economic activities," but if we wish to talk to economists and not just to each other, we had better realize that whether something is material or not is quite irrelevant.[2]

2) *Economics studies the production, distribution, and consumption of goods and services.* This is a widespread definition among anthropologists, and at first blush seems rather harmless. Although I have been emphasizing the attention that Polanyi and his associates give to material goods, they seem in the end to be particularly interested in the mechanics of distribution, though I have been unable to find a place where they come right out and admit this. Polanyi states, for instance, that when facing other societies than modern Western ones, economics must focus upon the "instituted process of interaction between man and his environment, which results in a continuous supply of want satisfying material means" (1957:248). However, he pays no attention to the technical processes that this definition seems to imply but rather considers the methods by which goods are distributed, and he constructs a typology of distributive systems which he calls respectively "reciprocity," "redistribution," and "exchange."

Many anthropologists have also focused their attention on distribution. If they are interested in the distribution of material objects only, then they run into the kinds of unfortunate complications already referred to, but if they mean seriously to include with economics the distribution of *all* goods and services, whether material or not, then everything that man does fits the definition. We tend to think rather casually of some services as having a primarily political or kinship character, such as arbitrating disputes or teaching children good manners, but they are still services as are all social acts. When economics is defined as the production and distribution of goods and services, one usually has in mind some other implicit meaning of "economic" that makes some services economic and others not. In other words, "economics is the study of the distribution of *economic* goods and services," but this is no definition.[3] Since this definition does not isolate any type of behavior from any other type, it is quite useless unless one wants to say that economics and social organization are synonymous. Since I believe that few anthropologists are ready to say this, this definition had better be abandoned.

3) *Economic anthropology treats in primitive societies those areas of life which economists study in ours.* However uninspiring this definition sounds when stated bluntly, I am convinced that it is the one which has dominated the thinking of most anthropologists who have tried to deal seriously with economics over the past decade or two. Anthropologists have felt that to talk about technology or subsistence or material culture is not enough, but nobody has really taken seriously the suggestion that the distribution of *all* goods and services should be included within the subject. Somehow it has been felt that we must discover what the economists are doing and then go forth and do likewise. Before we can do this we had better have a clear understanding not only

E
F
?

of the economists' formal definition of their subject, which may or may not correspond to what they actually do, but also of their reasons for considering specific topics. It is this which leads me to a reasonably obvious but, among anthropologists at least, only sporadically perceived truth: Whatever formal definitions they may give to their science (and these vary considerably) economists actually study the operation of the price system in our own society and the exchange of priced goods and services through the market system.[4]

It is worth noting that in the introductory sections of their books, when abstract concepts and definitions of the subject are given, economists may give formulations which make no reference to money or markets, but which are set in completely general terms. In an aging but standard introductory text book of economics, Fairchild, Furniss, and Buck (1936: Chapter 1) define most of the major concepts of economics without any reference to money at all: "Wealth consists of all useful material things owned by human beings." "Income consists of the benefits or services rendered by wealth or by free persons." "The undesirable events caused by wealth are called the disservices or costs of wealth." "The difference between the income and the cost of any article of wealth is its net income." Property is "the right to income; that is, the right to the benefits or services of wealth or free persons." "The value of anything is the quantity of any other thing that would be given in exchange for the first thing."[5] Once past their initial and formal definitions, however, economists have been perfectly clear about what their subject includes. Knight has declared that in practice the scope of economics is narrow, a situation he feels to be entirely proper. He says

> . . . there are many ways in which economic activity may be socially organized, but the predominant method in modern nations is the price system, or free enterprise. Consequently it is the structure and working of the system of free enterprise which constitutes the principal topic of discussion in a treatise on economics (Knight 1951:6).

Although Robbins, as will be seen below, gives a much broader definition of economics as a whole, even he feels that it is appropriate for economists to concentrate on the operation of "the exchange economy" (our system of markets as dominated by money prices) and recognizes that they have always done so. Robbins says that it is not incorrect to study other kinds of economy, but it is simply not particularly useful (1935:19).

There are, to be sure, good practical reasons for dealing with money and price. For one thing, price allows a form of quantification. One can specify whether price is going up or down, one can compute "total" value, and one can compare various commodities and services by means of the common denominator of dollars or pounds or rubles. As a result, economic discussion is for practical if not theoretical reasons limited to goods and services that are measured in money. But anthropologists ought to realize just how arbitrary the distinction between priced and unpriced commodities is, and how useless it is for their own work. We have not, however, for it is this distinction which makes us feel that a wage earner performs an economic service, while we leave a housewife's labor out of all of our national economic statistics. It is why food served in a restaurant is seen as an economic good, but food served hospitably to friends in one's home is not. It is why the services of a prostitute but not those of a wife are economic. It is why food bought in a store, but not the row of radishes in my back yard, enters into statistics of gross national product. It is what makes the distinction between professional and amateur athletics. Since we, in Western countries normally price food, housing, land, most manufactured products, and most labor outside of the household, we easily fall into the habit of considering these things to be economic in their nature. Since we do not price other goods, and services—hospitality, a housewife's labor, the care of children by their parents, brides, and Christmas presents—they are not considered economic. For certain practical purposes within our own society this is a useful if not theoretically unassailable approach. It does serve some useful purposes to calculate gross national product, and this can only be done by adding up values of things produced, and the only apparent common denominator to which these objects can be reduced is money value or price. Since a housewife's labor is not priced there is no conceivable way to add her labor into the total value of goods and services produced in our society, however uncomfortable we may feel about the logic of the figures that leave her out.

One can even make out a case that this concentration on the price system is not only practically, but even theoretically justifiable. Within our society the particular goods and services which are priced are treated in certain special ways. Money pricing and the operation of the markets gives a unity to a certain segment of our culture and this segment is important and deserves to be studied. But if economics is limited to a study of priced goods, it is an incredible contradiction in terms to speak of primitive economics, when we are dealing with a society without money. *What anthropologists have done, however, is to look upon the type of goods and services that we price and consider them to be economic even in other societies, instead of realizing that it is the phenomenon of pricing itself which gives these particular goods and services their unity.* Labor, manufactured goods, land, and the way in which these are allocated and exchanged are felt to be economic, even though they may no more be priced in some other society than is the labor of nursing an infant. Just because land is priced in our society is no reason to call it economic in another society where it is not priced, and yet land tenure is universally considered to fall within the scope of "economics." Some people, to be sure, price goods or services which we do not. Brides frequently are paid for, but because of our ethnocentric view that brides are not an economic commodity (because we do not happen to price them) anthropologists have resisted the idea that women can be bought and sold and have even suggested that it is somehow nicer to speak of "bride-wealth" than "bride-price."[5] This magic with words does not obscure the fact that in some parts of the world wealth is transferred in exchange for brides. In many places monetary compensation is paid to redress injuries such as theft, adultery, or even murder, though since we do not happen to feel that it is appropriate to price such transactions, we usually feel that they are not "economic."

I believe that it is fair to state that Herskovits, in the most extensive treatment of economic anthropology to date, adheres generally to the idea that anthropological economics is concerned in other societies with the same phenomena that economists deal with in ours (Herskovits 1952). He does recognize that economists concentrate on priced goods and services, but he does not conclude that this makes unreasonable the study of the same kinds of goods and services in other societies. He clearly feels that there is a category of behavior that is reasonably called "economic" and which can become the focus of special study (see for instance pp. 60–61). To judge by the topics with which he deals, this includes land tenure, ownership, trade, division of labor, and credit, even in societies where money is not used to organize them. It is true that he also extends his discussion to such things as gift and ceremonial exchange which we do not price, and to this extent he expands and makes more useful our conception of economics. But Herskovits does not deal with all the goods and services which are exchanged or produced in the society. He does not, for instance, deal with the care of children by their mother, or the services of a political leader and follower toward one another. He would have startled many people had he included these services, for they do not fit into our preconception of what economics embraces, but they are services which are just as much exchanged as are the services of a mutual-help team at harvesting. The only reason for considering the latter and not the former to be economic is that in *our* society we price agricultural labor, while we are not supposed to price political patronage or a mother's care.

It should be apparent that once we deal with any society other than our own, pricing is a totally useless means of distinguishing the economic aspect of society from the noneconomic aspects. If the unity of economics arises out of the fact that it deals with priced goods, then in some primitive societies it is silly to look for any behavior that can be called "economic." It is illogical to argue that other societies use other methods of distribution of these goods (which is, I believe, what Polanyi and associates assert) and that their substitutes for the market mechanism should be studied under the title of economics, if it is the market mechanism and its prices that give the particular goods and services of *our* economy their only unity. It is as if anthropologists from a matrilineal society insisted upon studying the matrilineal groupings of all other societies. One can, after all, isolate those kinsmen who are related to each other along the matriline, even in our own society. It simply happens to be nonsense to do so because we do not assign any duties or responsibilities on the basis of matrilineal descent. The association into a unified system of those goods and services which *we* price is just as arbitrary as the association of people into a matrilineage. It is silly to examine either system where it does not exist.

I was led to reject the "material" definition of economics because it seemed to me that technology, subsistence, and ecology are more conveniently called by some other term than "economic." I reject the definition which states that economics deals with the goods which are priced in our own society on different grounds: it is not a real category in any society but our own. It is, in fact, startlingly ethnocentric.

I believe that it is our felt but unstated knowledge of the areas of our life which are touched upon by our own price system that has made us hope for some unity in what we have called economics. If pricing is what gives unity to economics, perhaps we had better stop using the term at all unless we happen to be studying a society where money is important. Perhaps the most successful "economic" studies by anthropologists have been in areas where money is important—such as in Panajachel studied by Tax, and among the Malay fishermen studied by Firth. But if economics means a concern with the price system, then some societies simply have no economics. This would not offend me, but there are still some alternative uses of the term, which allow it to be applied to a less arbitrary category of culture, which deserve to be examined.

4) *Economics is the study of systems of exchange, whatever the particular institutional arrangements surrounding them may be.* I have pointed out that the justification for the traditional scope of economics in our society is that certain goods and services are united within one system by the common use of money when they are exchanged. Probably every society has some systems of exchange, and certainly we have several quite distinct systems ourselves. Hospitality is returned with considerable responsibility and calculated closely, although without the intermediacy of money. We even use expressions like "owing an invitation" or "working off our debts by throwing a cocktail party." The exchange of gifts and cards at various holidays forms another system. It would be as legitimate, though no doubt less important for conventional objectives, to study the way in which these gifts and countergifts are balanced, calculated, and agreed upon, as to study the transactions of a price setting market. Once these systems of exchange are noted one can hardly help recognizing systems of exchange in other societies, although they may be quite different from any that we have in our own. Some of these are old stand-bys in the anthropological literature: the kula ring; the system of potlatches in the Northwest Coast; feast-giving, prestige, and power in Melanesia; brides and cattle in Africa.

It must be emphasized that the isolability of these various systems is only partial. It is usually possible to convert goods and services normally exchanged within one system into those of another. We do, of course, use money to purchase goods which we then use in entertaining, so that our market system and our hospitality system are interrelated, but this does not mean that the value of hospitality can be expressed in a money price, as is evident from our relative evaluation of the simple but warm hospitality of our less affluent acquaintances, and the sumptuous ostentation of the wealthy. Bohannan gives an unusually clear example of the partial independence and partial interdependence of three systems of exchange found among the Tiv: 1) subsistence goods consisting of food and various household objects which are exchanged freely with each other but less readily converted into other forms of wealth; 2) prestige goods consisting of iron bars, cattle, and slaves, and 3) women, which before the confusion brought about by the introduction of money constituted an exchange system of their own (Bohannan 1955).

The systematic comparison of different systems of exchange might prove extremely interesting. One could ask such questions as whether similar methods of calculation are used in them all, whether the same principles of rational allocation are present, and to what extent the individual's motives vary. But it should be entirely clear that these systems of exchange do not necessarily include either material goods or money pricing. No one can predict ahead of time what systems will be found in any particular society. By this definition there is not *an* economic system but rather several economic systems in each society, and their characteristics can only be discovered through empirical observation.

Perhaps the definition of economics as the study of systems of exchange leads to the lease complex and contradictory results of any of the five definitions suggested here, but it is limited. It seems paradoxical to suggest that a single society may have several economic systems. Why not simply call them exchange systems?

One final definition which arises out of certain fundamental principles of theoretical economics remains. This approaches more closely the way in which many economists in their more thoughtful and less practical moments define their subject, and here I return to the formulation of Lionel Robbins.

5) *Economics is the study of the allocation of scarce means to multiple objectives, or more broadly "the science which studies human behavior as a relationship between ends and scarce means which have alternative uses."* (Robbins 1935:16). Many anthropologists who have concerned themselves with economic problems have recently used similar definitions, including Firth in his latest discussion of anthropological economics, and Herskovits.[3] But these authors, after indicating choice, allocation, and "economizing" to be the core of economic behavior, slip back to a consideration of "economizing" among material objects and ends, or only among the objects which *we* include in our market system. It is this mistake that Robbins avoids and it is for this reason that I have found his essay so valuable and so much more satisfying logically than the formulations of most anthropologists who have dealt with these problems.

Robbins points out that there is no economic problem if unlimited means are available for achieving some goal, and furthermore we do not have to economize if something has no alternative use whatsoever. "When time and the means for achieving ends are limited, *and* capable of alternative application, *and* the ends are capable of being distinguished in order of importance, then behavior necessarily assumes the form of choice" (1935:14. Italics in the original). One must choose between scarce means and apply them to the variously valued ends. The unity of economic science, says Robbins, lies in the forms assumed by human behavior in disposing of scarce means.[4] Neither ends nor means can necessarily be measured in monetary terms, and neither need consist of material objects, and so economics defined in this way has no necessary connection with the use of money or material objects. Since we are disposing of scarce means in virtually everything we do, economics in this view focuses on a particular *aspect* of behavior and not on certain kinds of behavior (Robbins 1935:17). The woman organizing her housework, the man allocating his time between his family and his club, the child deciding whether to play baseball or fly a kite, the political leader distributing patronage, and the feast giver who "gives" away food in order to accumulate prestige, are making "economic" decisions whether or not money has anything to do with their choice, and whether or not they are dealing with "material" objects. If Robbins, like other economists, goes on to study those types of behavior in which the economic aspect (choice and allocation) can to a certain extent be measured in money, it is not because of the principles of economics, but because of expedient and supplementary assumptions about what kinds of behavior are more and less important or more easily analyzed. Clearly, in turning to a primitive society, this alternative of restricting ourselves to priced phenomena does not exist. The implications of seizing upon the "economizing" aspect of behavior, as central to the study of economics, are a good deal more far reaching than has sometimes been realized, and my major criticism of both Herskovits and Firth, for instance, is that neither follows out the implications of his own definitions. If all behavior involving allocation is economic, then the relationship of a mother to her baby is just as much an economic one, or rather has just as much of an economic aspect, as the relationship of an employer to his hired laborer. A farmer hoeing his yams is being no more economic than when he is chatting with his cronies in the men's house. The economic aspect of behavior—choice, allocation of scarce means, including time and energy and not just money—is present in all this behavior. From this point of view it is quite hopeless to speak of an institution or group as being economic in nature. All groups have an economic aspect.

T. Hopkins

?

It is possible to look upon a society as a collection of choice-making individuals, whose every action involves conscious or unconscious selections among alternative means to alternative ends. The ends are the goals of the individual colored by the values of his society toward which he tries to make his way. They may include prestige, love, leisure, or even money. The means are the technical skills and knowledge at his disposal, including skill at oratory or endurance at the hunt as well as technical knowledge as such. There are no specifically economic techniques or economic goals. It is only the relationship *between* ends and means, the way in which a man manipulates his technical resources to achieve his goals, that is economic.

Now, strictly speaking, given a set of technical skills and knowledge and given a set of scalable ends or values, there is only one best way to use one to reach the other. The economist is not usually interested in either ends or means themselves but rather in the way in which means are manipulated to reach ends, and he is above all interested in working out the most efficient possible way of achieving certain ends, given the means. It is at this point that economists are likely to express their lack of interest in the economics of primitive people, because the most economic procedure for a primitive is presumably no different than it is for anyone, granted of course that both ends and means may be different in another society than in our own. To most economists it hardly matters how the members of any particular society make their choices. If they are inefficient and do not direct their means to rational accomplishment of their ends, why then, so much the worse for the people.

In practice, of course, economists have not worried about the general problem of how all of the varied ends of an individual can be met. They have limited their problem by asking how a particular man, say an entrepreneur, can best accomplish the end of a large money profit—how can money be maximized. This has an air of unreality when applied to a primitive society. People work and try to achieve their goals. They want more food, or more wives, or more prestige, and they clearly work to achieve these aims, but the ends they have in mind are never so simple as those dealt with by economists who speak of high money profit. Of course, the entrepreneur's aims are not really so simple either, but the grossness of the oversimplification becomes inescapable when looking at a primitive society.

Polanyi and his associates recognize that "economics" has often been used in this sense, to refer to situations of choice in areas of limited means.[1] They argue that price setting markets are found only in a limited segment of human history. They seem to conclude that for this reason it is difficult to study choice-making in other societies, but their interests are simply not centered on choice-making. Nevertheless, it may be worthwhile to examine choice-making even in societies where money and price-setting markets are absent. One can hardly argue that "economization," the careful calculation of choices with an eye to one's prospects, is missing simply because the particular institutional framework which helps us to make *some* economizing decisions (the market) is missing. Primitives are presumably neither more or less rational than any of us, although they may use different institutions through which to express their rationality. Of course, the system of market regulated prices cannot be studied in the absence of market regulated prices, but it may still be useful to study rationalizing calculation. Furthermore, certain characteristics of price-regulating markets may be readily seen even in societies very different from our own and in very different institutional settings. Where doweries are substantial or bride-price is required, the amount to be paid may be a matter of careful bargaining. The total bride-price may depend upon the desirability of the girl, either personally or as derived from her family's social status. Instances of curtailment or increase in the amounts of cattle available for bride-price (through disease or otherwise) show that the price also depends upon the supply of cattle. It seems entirely reasonable to suggest that certain characteristics of our marketing system that go under the name of "the law of supply and demand" are applicable in a much broader context than our own markets. This possibility would be obscured if we have to limit the range of meaning of economics to a consideration of material goods, as suggested by Polanyi. If we can get back to the initial assumptions of economists about scarcity of means and unlimited wants we may find that they are still useful assumptions even in the absence of markets and prices.

Here, then, is a final area of behavior to which the term "economic" might apply, the area of choice and allocation of scarce resources to alternative goals. It would study an aspect of behavior, not a type of behavior, and it would be an aspect of behavior that has no more connection with the material aspects of life than with others, and no necessary connection with the objects which are priced in our society. One of the troubles with our understanding of the economics of primitive people has surely been that we have confused the various possible definitions of economics and have persuaded ourselves that allocation of resources was somehow more characteristic of behavior that deals with material goods than with other behavior, or that the use of money coincided with the use of material goods or that only by using money could we rationally economize. It is clear, however, that economizing calculation, material goods, and items exchanged through price-setting markets, each refer to something distinctly different.

Once we focus upon choice and allocation, it becomes apparent that there have been a number of strands of thought in the social sciences that have looked upon human behavior from this essentially economic view. For the rest of this paper I will investigate just one of the implications of regarding human behavior as if governed by an attempt to allocate scarce resources in a rational way. I find it convenient to call this the principle of "maximization," But it is closely related to the idea of "rationalizing calculation."

MAXIMIZATION THEORIES

The notion that human behavior is somehow oriented toward a maximization of some desired end has appeared in a great range of social science theory. Maximization is, of course, a fundamental concept in economics, for a central axiom of that discipline is that human wants are unlimited, but that we constantly strive to maximize our satisfactions. More specifically, all of microeconomics, the study of how an entrepreneur or a firm should behave, assumes that he or it is trying to maximize money profit. Such questions as what will happen to profit if price is increased, or how a decrease in production will effect the ratio of income to costs, are at the heart of a great deal of economic theorizing, and they assume that the end in view is to make as much money as possible. Of course we know, and to give them their due I believe that economists know also, that not even entrepreneurs always strive to maximize money profit, but that sometimes they may prefer something else—leisure, conceivably even good human relations—rather than more money. This is not to deny that these entrepreneurs are trying to maximize something, but only states that they sometimes have to choose between money and some other desired end. The assumption that it is money that is being maximized is only a convenient simplification in line with the general attention of economists to those instances of choice and behavior in which money is involved.

Economics, however, is by no means the only branch of social science that has looked upon man as though he were maximizing something. Deeply imbedded in the Freudian conception of the personality lies the pleasure-pain principle. The id, in seeking to reduce tension, operates according to this "pleasure principle" always acting so as to maximize pleasure and minimize pain. The ego, mediating between the id and the outside world, is, to be sure, governed by an occasionally conflicting reality principle and must face the fact that pleasure is not to be achieved directly, but that the route toward satisfaction of the demands made by the id may be roundabout and involve the formulation of plans and complex procedures before final satisfaction is achieved. Freud even speaks of the suspension of the pleasure principle during this finagling toward the end of tension reduction. Finally, however, the goal of the ego is the same as that of the id, and this is the reduction of tension, or more generally the maximization of pleasure.

> Actually the substitution of the reality-principle for the pleasure principle denotes no dethronement of the pleasure principle, but only a safeguarding of it. A momentary pleasure, uncertain in its results, is given up, but only in order to gain in the new way an assured pleasure coming later (Freud 1925:18).

This Freudian personality is remarkably similar to the economic man. Both are striving for something, both are planning, both have an end in view, and both are trying by all the means at their disposal to reach the end and to get as much of it as possible. Of course, the ends in sight appear at first glance, at least, to be rather different, maximization of money income, or maximization of pleasure, and the contrast is especially strong when pleasure seems most closely related to sex. But sex is a very broad concept in the Freudian version of the personality, and, as has been said, money income is a convenient simplification, so, broadly speaking, both individuals are striving in parallel ways toward parallel if not identical objectives.

Other maximization theories have appeared in the social sciences, though none have become incorporated into such elaborate theoretical systems as these. Part of the conception of society that Leach presents in his book, *Political Systems of Highland Burma*, involves the assumption that men generally seek for power. Leach says:

> . . . I consider it necessary and justifiable to assume that a conscious or unconscious wish to gain power is a very general motive in human affairs. Accordingly I assume that individuals faced with a choice of action will commonly use such choice so as to gain power (Leach 1954:10).

Quoted simply, and out of context, this is unfair to Leach, for immediately preceding this statement he also says, "As a general rule I hold that the social anthropologist is never justified in interpreting action as unambiguously directed toward any one particular end." Nevertheless, for his particular task, namely the analysis of the shifting power relationships of upper Burma, he finds it convenient to suggest that people generally strive to maximize their own power. As he goes on to analyze the situation, the power seeking by many individuals, each using whatever means the social environment offers to him, leads to shifting power relationships in the society as a whole, and this barmonizes with a more general conception of society as being given its dynamism by the multiple striving of all of its members, each seeking his own ends, each using the society where it is convenient, each going against the usual rules of the society where he feels he can get away with it and where it will be worthwhile in terms of his own goals. In fairness to Leach, it must be said that I do not interpret him as presenting power as the main or major motive of all men, and that if he were analyzing some other relationship than that of power he might focus on some other general motive that could be imputed to all men. Taken superficially, however, one might be tempted to raise power to the overriding position that similar exaggerations of money profit in economics, or of the biological urges of the id in psychology, have assumed. Harold Lasswell in his book, *Power and Personality*, considers the pursuit of power from a similar point of view and explicitly compares the interest of political science in the pursuit of power to the interest of economics in the pursuit of wealth. Lasswell, however, does not suggest that the pursuit of power overrides other goals in human behavior, but only that it is this particular pursuit that political science deals with (Lasswell 1948).

All three of these conceptions of human behavior focus on something that seems real, but something that is incomplete. People do not always try to maximize money, or basic biological satisfactions, or power, though all of these certainly do enter into our decisions, and, in a general way, the more we have, the happier we expect to be.

The most explicit theory of maximization which I know of is that of George Zipf, who wrote an incredible book called *Human Behavior and the Principle of Least Effort* (1949). Kluckhohn reviewed this book as being " . . . fertile and suggestive, mad, irrelevant" (1950:270), and indeed it was all of these things. Zipf believed that all of our behavior is oriented toward the minimization of effort. Now, taken literally, and the delight of Zipf's book is that he stated his principles with no leeway for ambiguity, this is nonsense. Athletic events and taking a walk to work up an appetite are hardly understandable within this framework. This among other flights of fancy has lead most people who have stumbled upon his book to reject his principles, even while recognizing the fertile mind which produced them and the remarkable collection of data which he believed would support them. However, even some of his principles may deserve an examination. Like the economist, the Freudian psychologist, or like Leach or Lasswell when they look at political behavior, Zipf assumes that people are trying to orient their behavior, that is, make their choices in such a way that they will obtain the greatest possible amount of something. Zipf recognizes, and in fact he spells out in detail, how a man in trying to minimize effort may be lead a long way around to reach his ultimate goal. It may pay in the long run (in terms of less effort) to stop work and make a new tool because, even though it takes effort to make the tool, the total effort expended may eventually be less when the tool is used. He discusses how various factors may make it more or less desirable to have many specialized tools or a few more generalized ones. He demonstrates with an enormous collection of data that the words we use most frequently are the shortest ones and says that in the long run this means a lesser expenditure of effort in speaking. He also points out that there is a point beyond which the planning to minimize effort is itself more costly of effort than the amount saved, and it is therefore extramarginal. One does best, in terms of saving energy, not to plan beyond that point. Now all this is rather neat, and it is reminiscent of the discussions of economists on how to maximize money income, except, of course, that it is so absurd to set up the minimization of effort as the overriding goal which guides all of our behavior. Perhaps it is no more extreme than the idea that maximization of income, or sex, or power is the main dynamo of human behavior, but the people who have suggested these other motivations have hedged more cautiously than Zipf did. Money income is a convenient simplification to the economist, "pleasure" is a broad enough concept to include all of our motivations, and Leach suggests power only for the particular purposes of a particular analysis. Zipf's mistake was to give himself no loophole, but to maintain that effort minimization was the one and primary motive of all human behavior. His lack of ambiguity, however, even though it may have lead him to be rapidly rejected as a somewhat mad genius, allowed a more explicit formulation of the implications of a maximization theory than any of the others, except perhaps for technical economics.

All of these theories are disconcerting for much the same reason: all are too simple. Clearly the things we want are more complicated than expressed by any of these simple motivations. Certainly we are sometimes happy to avoid effort, and we often seek money or power, but these are not always sought after by all people. More significantly, we often have to choose *between* these things. We must decide whether leisure (minimum effort) is more or less important to us at the moment than an increase in money income, or whether power is to be sought after instead of either of these, and it is here that Zipf presents an intriguing argument. He points out that it is quite impossible to maximize two things at once. One might, for instance, offer a prize to the submarine commander who sinks the greatest number of ships in a given interval of time. Alternatively, one might offer the prize to whoever sinks a given number of ships in the shortest possible time: "Yet when we offer a prize to the submarine commander who sinks the *greatest number* of ships in the *shortest possible time*, we have a double superlative—a *maximum* number and a *minimum* time—which renders the problem completely meaningless and indeterminate, as becomes apparent upon reflection" (1949:3). Similarly, one cannot simultaneously try to maximize both sexual satisfaction and the acquisition of money, because there may come a time when there is a choice between the two, and to increase one will at the same time decrease the other. This is precisely the same argument that Robbins used in denying that economics could in principle be restricted to material ends, since one often has to decide between material and nonmaterial objectives. To scale one's ends and distinguish them in the order of importance implies some general standard against which the more specific goals can be measured. This presumably is what economists mean when they speak of achieving satisfactions as the ultimate goal.

Now to say that an individual strives to maximize his satisfactions is to state little more than a truism. Unless satisfactions are expressed in some more concrete form, such as money, they are ill defined and of course may shift from time to time for the same person and also be different for various individuals. All that is really said is that our behavior is goal oriented and that the various immediate goals are themselves measurable with respect to one another and can be scaled. It certainly does not help us to predict human behavior, since the only way we know what is desired is to watch which choices people make. So, we are faced with a dilemma. If we state that people act so as to maximize something broad enough ("satisfactions") to subsume all our more specific goals, we say very little. If we state that we act so as to maximize one particular goal—power, money income, or whatever we choose, then usually we are incorrect. But the idea of maximization cannot be abandoned since any discussion of purposive or goal-oriented behavior, or any analysis of choice, does imply a maximization theory and we may as well make explicit a common notion in the social sciences, and for that matter in all of our everyday thinking. It does bring us closer to one of the basic postulates of economics.

Economists have assumed that our wants are infinite. This does not mean that any *particular* want is unlimited, and specifically the desire for material goods may conceivably not be unlimited. Western industrialism has increased material goods so greatly that one can at least imagine that the desire for these may eventually be satiated. Some goals, however, have inherent limitations. Power and prestige cannot be multiplied for everybody since the implication of Aristotle more power or prestige for some people in a society is that others must have less. For every winner in the race for prestige, just as in a running race or football game, there is also a loser. As has long been pointed out, moreover, much of modern purchasing is not based so much on the desire for material objects, anyway, as for the prestige that it is hoped these objects—cars, swimming pools, or filled book cases—will bring. The principle that our wants are unlimited is a statement that is hardly susceptible of proof, but it may be a useful axiom which can be assumed to lie at the base of human behavior and which can bring sense to a good deal of man's actions. Similarly, it seems reasonable to accept the principle that the means of achieving our desires are limited so that we can only manipulate our means so as to satisfy as many of our wants as possible. Interpreted in this way and stripped of their connotation of money profit, these basic postulates of economics may be worth incorporating into a more general theory than that of market analysis.

From this point of view, we are "economizing" in everything we do. We are always trying to maximize our satisfactions somehow, and so we are led back to the notion that economics deals not with a type but rather with an aspect of behavior. This economic view of society becomes one way, or if one prefers, one model for looking at society. It is a model which sees the individuals of a society busily engaged in maximizing their own satisfactions—desire for power, prestige, sex, food, independence, or whatever else they may be, in the context of the opportunities around them, including those offered by their own culture. Since one makes choices partly with an eye to the expected choices of others, it is not unreasonable to view this pursuit of satisfactions as a great and continuing game of strategy. It makes no sense at all for anthropologists to try to limit economics to mean the pursuit of one particular goal.

If we now focus upon the individual who is caught in the web of his society, and who is trying to maximize his satisfactions, we are led to the investigation of his actual behavior in situations of choice. This is the crucial economic question. In the first place, one must allocate his own resources. A woman must allocate her attention between her husband and her children, and for that matter save a bit for her mother. Attention, like money or time, must be economized. Patronage must be allocated among followers. Admiration or prestige must be granted to some people, denied to others. Each person has at his disposal a certain amount of love, of admiration, and of power, as well as of labor or money or energy, and these must all be distributed. It is reasonable to suppose that they are distributed with the intention of maximizing one's own satisfactions. They are granted with the idea of return in some form. One gives prestige in return for bride-wealth, or labor in return for wages, or care of children in return for affection or social approval, and it is totally irrelevant whether money or material goods happen to be part of the equation in these various types of exchange, though in a sense we are acting so as to make a profit in all of this exchange behavior. We feel that the prestige gained is worth more than the food we give away, or that the power gained is worth the distribution of patronage, though of course the person with whom we are trading must feel differently, or we could never come to terms. This leads to a conception of social organization as a whole as a system of exchange, a broader concept than that of the particular and limited systems of exchange mentioned earlier.

George Homans not long ago suggested that an exchange model would be a useful one in uniting various lines of social science research:

> . . . [small group research] would be furthered by our adopting the view that interaction between persons is an exchange of goods, material and non-material. This is one of the oldest theories of social behavior, and one that we still use every day to interpret our own behavior, as when we say 'I found so-and-so rewarding'; or 'I got a great deal out of him'; or even 'Talking with him took a great deal out of me.' But, perhaps just because it is so obvious, this has been much neglected by social scientists (Homans 1958:597).

Homans goes on to consider several experiments in sociology and even in animal psychology and uses terms such as "cost," "value," and "profit" to describe them and even constructs the formula: Profit = Reward − Cost. He uses these terms in very much the same way that they are defined in the elementary economics textbook referred to earlier (Fairchild, Furniss, and Buck 1936), but Homans realizes that in his experiments as in much of life, these cannot possibly be measured in money. Exchange, like maximization, is certainly close to the heart of economics, and in fact an exchange model of society is remarkably similar to conventional economic analysis, even though it takes into account far more than our primitive notion of economics. It should be possible to speak of the supply of prestige, the demand for power, and the cost of authority. I see no reason why one should not even speak of the marginal utility of loving care. Each man can be regarded as an entrepreneur, manipulating those around him, trading his products of labor, attention, respect, etc., for the most he can get in return.

The trouble with this is, of course, that there seems to little prospect for quantification. The contrasting beauty, perhaps a spurious beauty, of traditional economics is that one can assign figures to the commodities and services that are exchanged, because they have prices, and one can then manipulate the figures. But unless the anthropologist uses concepts of economics, cost, value, demand, supply, etc. in a much broader context than is the custom of the economist, over a range of meaning far wider than that which is priced, he had better stop talking about economics.

The view of society as a system of exchange, and the view that men act so as to attempt to maximize satisfactions, are fundamentally economic ones and are close to the way in which economists look upon their subject matter. However, unlike anthropologists, economists have not ordinarily been interested in finding out *whether* people economize intelligently, but only in figuring out *how* they can economize more intelligently. This difference in objectives creates an almost unbridgeable gap between economics and anthropology, because an anthropologist is always most interested in the actual behavior of men in concrete situations. I think, however, that a clear conception of this broader "economic" or "exchange" view of society might, if followed out consistently, be of interest even to the economist. The problems that have to be wrestled with in describing a society in this manner make themselves known most insistently where money value is not used as a means of measurement. Once this problem is clearly faced, it is obvious that the same problem exists in our own society. There are many things which we do not price, and our behavior can never be understood if we focus only on those limited types of behavior which are priced. We must constantly choose between monetary and nonmonetary goals. Even if an economist is interested only in advising people how they ought to behave if they want to maximize their satisfactions (and not just their money income), he will have to take nonmonetary goals into account. From this point of view I think that anthropology could play its time-honored role of broadening the viewpoint of others and making even our own society more understandable, because of the attention it has directed towards differing cultures. Of course, we will have to get economists to listen to us first, but we cannot possibly expect economists to listen to us until we get some clear idea of what economic science is trying to achieve, and of what "economic" means. As long as we stumble along with the extraordinarily ethnocentric notion that somehow economics is primarily connected with food production, or with material culture or land tenure, or certain restricted types of labor, then we are missing any opportunity for fruitful communication with our economist colleagues.

NOTES

[1] This paper is the product of several frustrating attempts to teach a course with the title "Primitive Economics" and to decide what in the world that meant. My students deserve my thanks and apologies for letting me try out various ideas on them. I am also indebted to Edward B. Harper of Bryn Mawr College for suggestions and criticisms.

[2] For a discussion by an economist of the anthropological misinterpretation of "economics" as "subsistence," see Knight's review of Herskovits' *The Economic Life of Primitive Peoples*, reprinted in *Economic Anthropology*, especially pages 520–521 (Knight 1952).

[3] This absurd phrasing hardly exaggerates the position of some workers. Dalton says, "Few economic transactions [in Western market economy] take place without the use of money." If a transaction is economic because it involves money, then this is a glorious tautology. If "economic" is given some other meaning then the statement is untrue (Dalton 1961:13). A somewhat related statement is that of Polanyi: "Only in the presence of a system of price-making markets will exchange acts of individuals result in fluctuating prices that integrate the economy" (1957:252). But a price-making market is *defined* as an institutional arrangement in which the exchange acts of individuals result in fluctuating prices that integrate the market. It is wonderful to discover definitions.

[4] This point was clearly made by Dalton, although he emphasized the market exchange economy and somewhat minimized the place of money. He says: "The term money economy emphasizes a derivative rather than the dominant feature of Western economic structure. The use of all-purpose money is not an independent trait, but rather a requirement for the functioning of a market exchange economy" (Dalton 1961:15). I am not certain that I understand these sentences completely. They seem to say that money is both a prerequisite to, and a derivative of the market. But the point is surely that whenever we price goods in our society we speak of there being a market for these goods (or services). The two concepts are almost synonymous, and rather than focus on the somewhat abstract idea of the market, one may as well recognize that priced goods have formed the core of the materials which economists study.

It should also be pointed out that the phrase "all purpose money" is an unfortunate one, and that there are plenty of things in our society (wives, hospitality) that cannot be purchased with money, and that we do not ordinarily price. As a result there is no market for these items. Our money is not "all purpose" by any means.

[5] Only when these terms are defined does money finally come in and the authors state that ". . . value is almost always expressed in terms of money" (1936:23). This final statement is nonsense if the earlier definitions are taken seriously (are the value of wives, Christmas presents, or political patronage expressed in money?) for the earlier definitions are so general that they can be interpreted as applying to all aspects of social behavior.

[6] This foolishness was neatly disposed of by Robert F. Gray in a recent article which showed how impossible it is to avoid calling this a purchase (1960).

[7] The first words of Herskovits' first chapter are: "The elements of scarcity and choice are the outstanding factors in human experience that give economic science its reason for being" (1952:3). Similarly, Firth states: "[A modern economic anthropologist] examines the ways in which [the people he studies] conceive of and express their wants and dispose of their available resources in a given social milieu" (1959:25).

[8] Dalton also recognizes this to be one of the significant definitions that has been given to "economics" and he presents it in very much the same way. Unfortunately, after sensibly pointing out that economizing calculation is not limited to the creation and distribution of material goods, he goes on to say that economists deal with economizing calculation with respect to material goods and thereby seriously distorts the work of economists. Incredibly, after a short paragraph in which he uses the word "material" no less than four times in an attempt to define what Western economic analysis is all about, he gives a reference to Robbins' essay, although one of the major

points that Robbins had to make was that economic analysis has no necessary connection with material goods (Dalton 1961:7).

[2] The core of Polanyi's theory is found in Chapter XIII of the book, which was written by Polanyi himself (Polanyi et al. 1957).

REFERENCES CITED

BOHANNAN, PAUL

1955 Some principles of exchange and investment among the Tiv. American Anthropologist 57:60–70.

DALTON, GEORGE

1961 Economic theory and primitive society. American Anthropologist 63:1–25.

FAIRCHILD, F. R., E. S. FURNISS, and N. S. BUCK

1936 Elementary economics. New York, Macmillan. 3rd edition.

FIRTH, RAYMOND

1946 Malay fishermen: their peasant economy. London.

1959 Economics of the New Zealand Maori. R. E. Owen, Government Printer, Wellington, New Zealand.

FREUD, SIGMUND

1925 Formulations regarding the two principles in mental functioning. Collected Papers. Vol. 4, pp. 13–21.

GRAY, ROBERT F.

1960 Sonjo bride-price and the question of African "wife purchase." American Anthropologist 62:34–57.

HERSKOVITS, MELVILLE J.

1952 Economic anthropology. New York, Alfred Knopf.

HOMANS, GEORGE C.

1958 Social behavior as exchange. American Journal of Sociology 63:597–606.

KLUCKHOHN, CLYDE

1950 *Review of* Human behavior and the principle of least effort, by G. K. Zipf. American Anthropologist 52:268–70.

KNIGHT, FRANK H.

1951 The economic organization. New York, Augustus M. Kelley.

1952 Anthropology and economics. *In* Economic anthropology, by Melville Herskovits. New York, Knopf.

LASSWELL, HAROLD

1948 Power and personality. New York, W. W. Norton.

LEACH, E. R.

1954 Political systems of highland Burma. Cambridge, Massachusetts, Harvard University Press.

POLANYI, KARL, CONRAD M. ARENSBERG and HARRY W. PEARSON (eds.)

1957 Trade and market in the early empires. Glencoe, The Free Press.

ROBBINS, LIONEL

1935 An essay on the nature and significance of economic science. 2nd edition. London, Macmillan.

TAX, SOL

1953 Penny capitalism: a Guatemalan Indian economy. Smithsonian Institution. Institute of Social Anthropology, Pub. No. 16. Washington.

ZIPF, GEORGE KINGSLEY

1949 Human behavior and the principle of least effort. Cambridge, Massachusetts, Addison-Wesley.